



**NORDREGIO**  
Nordic Centre for Spatial Development

# Strong, Specific and Promising

## Towards a Vision for the Northern Sparsely Populated Areas in 2020

**Erik Gløersen**

NORDREGIO REPORT 2009:2





Strong, Specific and Promising:  
Towards a Vision for the Northern  
Sparsely Populated Areas in 2020



# Strong, Specific and Promising: Towards a Vision for the NSPA in 2020

Erik Gløersen

Nordregio  
P.O. Box 1658  
SE-111 86 Stockholm, Sweden  
[nordregio@nordregio.se](mailto:nordregio@nordregio.se)  
[www.nordregio.se](http://www.nordregio.se)  
[www.norden.se](http://www.norden.se)

### **Nordic co-operation**

takes place among the countries of Denmark, Finland, Iceland, Norway and Sweden, as well as the autonomous territories of the Faroe Islands, Greenland and Åland.

### **The Nordic Council**

is a forum for co-operation between the Nordic parliaments and governments. The Council consists of 87 parliamentarians from the Nordic countries. The Nordic Council takes policy initiatives and monitors Nordic co-operation. Founded in 1952.

### **The Nordic Council of Ministers**

is a forum of co-operation between the Nordic governments. The Nordic Council of Ministers implements Nordic co-operation. The prime ministers have the overall responsibility. Its activities are co-ordinated by the Nordic ministers for co-operation, the Nordic Committee for co-operation and portfolio ministers. Founded in 1971.

Stockholm, Sweden  
2009

# Contents

## Table of contents

Preface .....	7
Introduction.....	9
1. The foresight and vision process .....	13
2. Towards a vision for the NSPA .....	21
Controlled demographic trends .....	25
Balanced, dynamic communities.....	33
A more cosmopolitan NSPA .....	38
Improved urban qualities.....	41
Robust and productive local economies .....	47
Coordinated actions to promote sustainable tourism .....	54
World level R&D activities within specific industrial niches .....	59
Coherent regional transportation systems .....	67
3. Conclusion: Proactive and reactive visions for the NSPA.....	75

## Figures

Figure 1: The foresight cycle .....	13
Figure 2: Issues identified as being of particular relevance for the NSPA Vision and Foresight.....	14
Figure 3: Process overview .....	17
Figure 4: Demographic trends in NSPA Labour markets – 1992 to 2007 .....	29
Figure 5: In-migration to the NSPA.....	30
Figure 6: Understanding and influencing migration: Typology of municipalities according to the age of in-migrants .....	31
Figure 7: Understanding and influencing migration: Typology of municipalities according to the age of out-migrants.....	32
Figure 8: Underrepresentation of women in rural parts of the NSPA.....	35
Figure 9: Underrepresentation of young adults .....	36

Figure 10: Underrepresentation of foreign-born persons.....	39
Figure 11: New commercial dynamics in the NSPA.....	42
Figure 12: Urban and rural dynamics of the NSPA.....	46
Figure 13: The NSPA is not a poor region .....	52
Figure 14: Research and Technology Development centres in the NSPA.....	63
Figure 15: Air connections from NSPA airports .....	71
Figure 16: Main transport axes to be developed in the NSPA .....	74

## Table

Table 1:List of participants at NSPA Foresight workshops .....	18
--	----

## Text boxes

Text Box 1: Ristijärvi Seniorpolis: a concept for senior citizens and a factor of enhanced innovation .....	37
Text Box 2: Lappland mining industry .....	40
Text Box 3: Finnmark immigrants returning to Russia.....	40
Text Box 4: Development and production of oil containment booms .....	50
Text Box 5: Creative activities in the NSPA .....	51
Text Box 6: Space related activities in the NSPA.....	53
Text Box 7: Examples of tourism development in the NSPA.....	56
Text Box 8: Transforming the industrial heritage of Västernorrland into a resource.....	57
Text Box 9: Branding efforts to promote high quality food from Jämtland.....	57
Text Box 10: Energy research and development in the NSPA.....	61
Text Box 11: Telecom and ICT development in Kokkola – Central Ostrobothnia.....	63
Text Box 12: Promotion of innovation in the NSPA .....	64
Text Box 13: Innovation in the fish farming and fish processing industries .....	65
Text Box 14: Selection of NSPA “Wild cards” mentioned in the workshops .....	76

# Preface

The present report is one of three deliveries produced as part of the foresight and visioning exercise for the Northern Sparsely Populated Areas (NSPA). The two other outputs are an analytical report on the current state and perspectives of the NSPA and a policy road map for their future development and positioning in the European and global perspectives. All are part of a continued effort to promote an enhanced understanding of the northernmost parts of Europe. The emphasis is put on the opportunities and initiatives allowing the NSPA regions to assert themselves as active partners contributing to the achievement of the Lisbon and Gothenburg objectives of economic growth and sustainable development.

The foresight and vision exercise was organised at the initiative of the Brussels representation offices of the regions of North Finland, East Finland, North Norway, North Sweden and Mid Sweden. It is the result of an ongoing dialogue between these regions and the European Commission. Together with the Austrian planning conference Örok's scenario project<sup>1</sup>, it is one of two foresight exercises specifically designed as an input to ongoing to European regional policy debates. As such, the purpose is to provide insights and ideas for the specification of "Territorial cohesion" as a European objective and to constitute a first basis for discussions on the ambitions and instruments of the Structural Funds during the 2013-2020 programming period.

The exercise has benefited from the active support of the European Commission (DG REGIO) as well as from a wide range of stakeholders and organisations across the NSPA. These have contributed through their participation in workshops and meetings, the provision of feedback on interim reports and deliveries and by providing inputs, ideas and background material.

The Foresight and Vision exercise was made possible thanks to the contributions of a group of Nordregio colleagues. The workshop process was designed and moderated by Susan Brockett. Alexandre Dubois, Johanna Roto, Rasmus Ole Rasmussen and José Sterling contributed to the analytical report. Together with Anu Henriksson, Stefanie Lange and Jon M. Steineke they also participated in the workshop as moderators and rapporteurs.

We would like to thank all the persons involved for their precious contribution.

---

<sup>1</sup> "Scenarios for the spatial and regional development of Austria in the European context" [http://www.oerok.gv.at/fileadmin/Bilder/5.Reiter-Publikationen/Schriftenreihe\\_Kurzfassung/Schriftenreihe\\_176\\_I\\_Zusammenfassung\\_EN.pdf](http://www.oerok.gv.at/fileadmin/Bilder/5.Reiter-Publikationen/Schriftenreihe_Kurzfassung/Schriftenreihe_176_I_Zusammenfassung_EN.pdf)



# Introduction

When choosing to organise a joint foresight and visioning exercise for the Northern Sparsely Populated Areas (NSPA), the regions of North Finland, East Finland, North Norway, North Sweden and Mid Sweden have demonstrated their commitment to approaching their own development in a global and European perspective. Considering the major foreseen global challenges in the 2020 horizon, the ambition is to ensure that NSPA regions shall be part of the solution rather than the problem. New types of situations will result from continued economic globalisation, climate change, increases in energy prices and ageing; the NSPA aspire to design a range of proactive policies addressing them, by adapting the role of the regions in global social and economic systems and by taking their share in solving the challenges ahead. Drawing up visions for a sustainable future does not imply producing a growth and development strategy for the NSPA regions taken in isolation, but presupposes that one considers the new economic roles they may play in a changing international context.

In a European perspective, the NSPA regions are renewing the line of argument in favour of a specific treatment of its northern, peripheral and sparsely populated regions that has been prevailing since the European Economic Area (EEA) and European Union (EU) membership negotiations of Finland, Norway and Sweden in the early 1990s. The traditional stance was based on what one could call “exceptionalism”, treating these areas as essentially different and, by way of consequence, incomparable to any other region of Europe. This allowed most of the NSPA regions to benefit from regulatory special treatment in European competition policies and to receive funding as part of EU regional policy. However, with the negotiation for the 2007-2013 Structural Funds programming period, the European Commission requested more concrete evidence on the specific challenges justifying policy measures. The EU-offices of North and East Finland, North and Mid-Sweden and North Norway asked Nordregio to produce a report highlighting their specific economic and social development conditions. This report contributed to allocation of an additional € 535 million Structural Funds support to the northernmost regions, acknowledging a continued recognition of these areas’ specificity.

The European Commission now emphasises that it has a good understanding of the challenges encountered in North Norden. It therefore requests more evidence on the development opportunities that could justify further European efforts in terms of funding and policy design. In order to provide the best possible inputs on these issues, the EU offices of the concerned regions asked Nordregio to organise a vision and foresight exercise involving a wide range of regional stakeholders.

The European perspective is embedded in the very notion of 'NSPA', which has come to exist as a result of economic and institutional integration in the European Union (EU) and in the European Economic Area (EEA). Regions of North and East Finland, North Norway and North Sweden no longer consider themselves merely as peripheries in their respective national context, but increasingly as a transnational European macro-region. This however does not imply that the NSPA can be considered to be functionally integrated. The denomination 'macro-region' reflects a certain number of shared traits and common interests, and an ambition to develop transversal connections; the shift from being a group of peripheral regions in their respective national context to becoming a European entity has only just started.

Describing the NSPA as a 'European macro-region' is therefore mainly a way of expressing a political project that finds its justification in current territorial structures, demographic and economic trends and foreseen challenges. The credibility of this project depends on the political and institutional capacity to follow up currently expressed aspirations through concrete actions, which may be initiated and supported both by regional, national and European actors. Rather than an empirically grounded notion, the 'macro-region' can therefore be regarded a tool to translate territorial ambitions into concrete policy making, and gather actors around a shared project.

Within such a macro-regional perspective on the NSPA, one needs to incorporate the fact that these regions also belong to the larger Baltic Sea Region (BSR). This area includes large metropolitan regions, is characterised by major East-West contrasts in terms of economic development and constitutes a strategic geographic sphere for cooperation between the European Union and Russia. Given the NSPA's low demographic weight and relative economic prosperity, there is a risk that its specific issues may not be given high priority in a BSR perspective. On the other hand, the prominent position of the Baltic Sea Strategy on national and European political agendas provides a valuable arena for marketing the regions of the NSPA and extending their institutional networks. This visioning exercise therefore needs to focus on the position of NSPA regions on the northernmost shores of the Baltic Sea, with the possibilities this offers in terms of interface with the Barents Sea, Arctic sphere and Norwegian Sea as well as with North West Russia. More generally, the vision shall help the NSPA regions highlighting their specificities and potentials and thereby facilitate an active involvement in the Baltic Sea Region.

In a wider European perspective, the NSPA regions have demonstrated a commitment to support policies of balanced regional development and territorial cohesion. Beyond the efforts

to ensure a maintained recognition of the specific social and economic challenges of northern and sparsely populated areas and to secure funding from different community support schemes, NSPA representatives have sought to develop a mutually beneficial dialogue with European authorities. By formulating a joint medium- to long-term perspective on the social and economic objectives of northern and sparsely populated regions in three countries, the NSPA first emphasize the transnational and European dimension of these territorial development policies. Secondly, the objective of the NSPA is to demonstrate that financial support and regulatory special treatment are not defensive measures to alleviate the effects of challenging situations, but part of a pro-active strategy to achieve well-defined growth objectives that will benefit not only the concerned regions, but Europe as a whole. The NSPA thereby actively support the Commission perspective on regional policy as an instrument for overall growth and development in European.

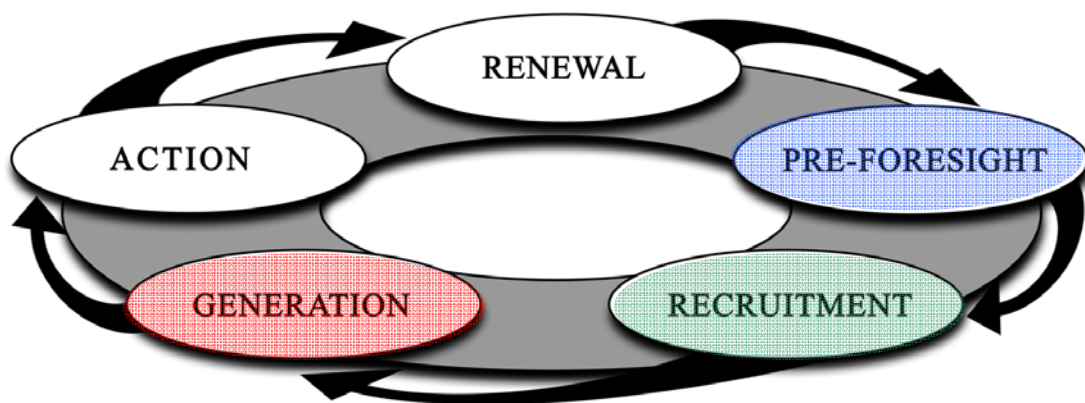
The NSPA foresight and visioning exercise has been designed to increase the European visibility of these regions. Not only do the northernmost parts of the continent contribute significantly to its overall creation of wealth, especially when compare to their population. They are also an important component in transnational industrial systems, both through the natural resources they provide and on the basis of their research and development activities. As such, the current approach of territorial cohesion, seeking to facilitate processes of functional integration rather than the convergence of economic and social performance, makes it all the more relevant to include the NSPA in European territorial policies. Thematic maps of the European territory cut just above Helsinki, Oslo and Stockholm or treating the NSPA as if they were a “vast emptiness” are therefore not only politically unacceptable; they also fail to adequately represent whole sections of Europe’s economic development perspectives.

While the cooperation between NSPA regions is well-established in Brussels, the conscience of belonging to an area with shared opportunities and challenges is still insufficiently developed within the regions. Linguistic barriers and the lack of transversal transportation networks have contributed to a relatively weak communication between different parts of the NSPA. The foresight and vision exercise therefore also has an internal purpose, helping to increase the awareness of belonging to an area with common features from a European point of view and seeking to improve the perception of the NSPA population of their own regions. The very process of organising workshops and meetings and of submitting joint documents to the simultaneous appreciation of regional stakeholders from all parts of the NSPA has therefore in itself contributed to establish the NSPA as a component of the European territorial diversity.

The main part of foresight and visioning exercise occurred before the effects of the global financial crisis made themselves felt in Europe. This crisis has since led to a series of layoffs in the processing and mechanical industries in the NSPA, to significant problems in the mining and forestry industries and to a drastic reduction in demand for Norwegian Sea fish, once again demonstrating the particular vulnerability of some of these regions' key economic sectors to global economic fluctuations. Far from invalidating the results of the vision and foresight exercise, these recent events therefore confirm the need to improve the resilience of NSPA economies. Current or future economic difficulties may furthermore facilitate certain economic transformation processes, by reducing the pressure on the labour market and making recruitments possible within the sectors of activity considered most promising for the long term economic and social development of the NSPA.

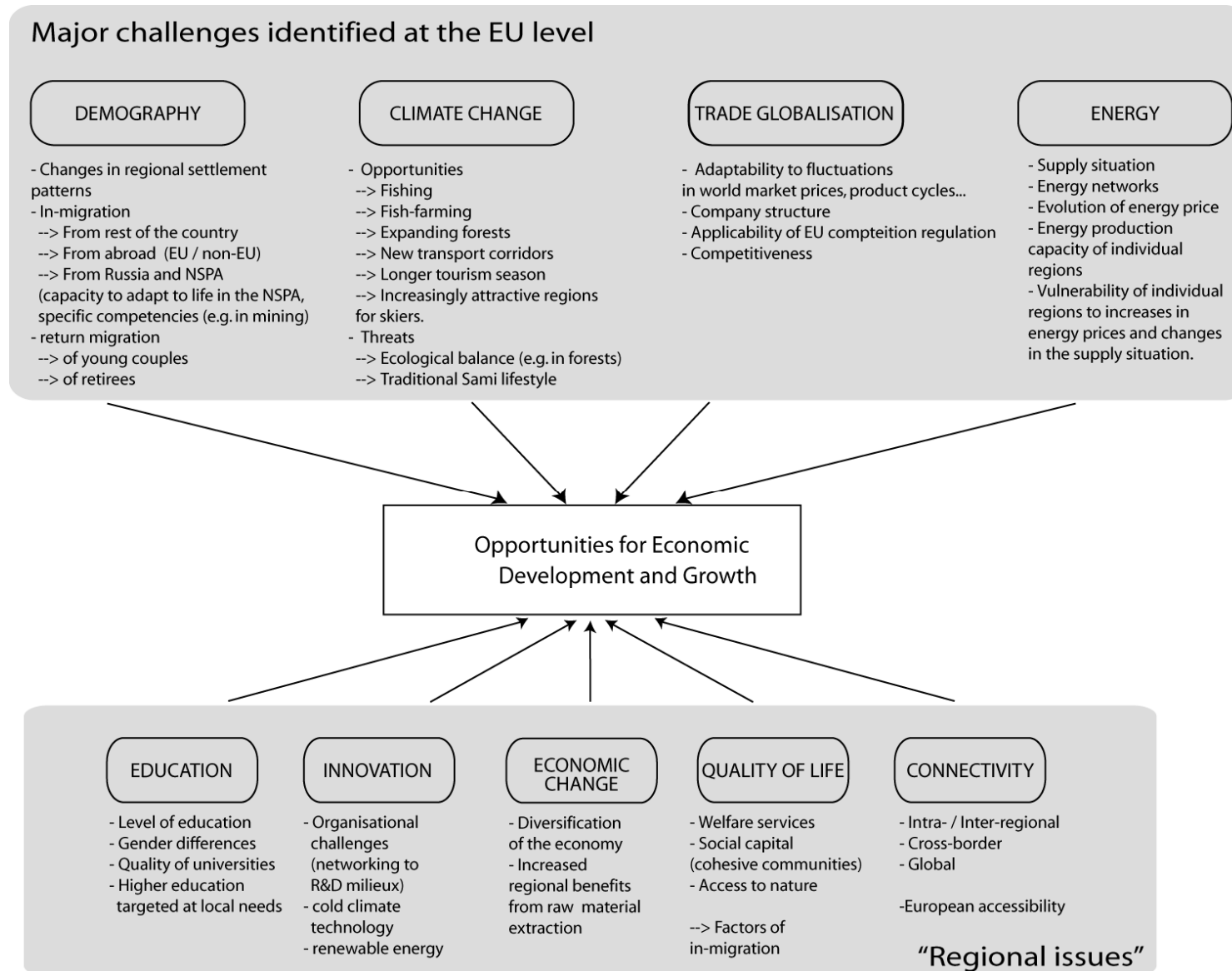
# 1. The foresight and vision process

The Foresight and Vision exercise was organised in three phases, inspired by Ian Miles's "foresight cycle" (Figure 1). At the pre-foresight stage, the Steering group, i.e. the European representation offices of the NSPA regions first produced an idea paper, which was followed up through a dialogue with Nordregio. This led to an agreement on a list of issues to be addressed in the visioning process. The scheme that this resulted in is presented in a slightly revised version, incorporating some adjustments made later in the process (Figure 2). The general departing point are the four major challenges identified at EU level, namely demographic and migratory trends, climate change, economic globalisation and rising energy prices. All of these are considered particularly relevant for the NSPA, as later confirmed during workshop discussions. In addition, a list of thematic fields which NSPA regions wished to focus on specifically was produced. This list includes the organisation of higher education, the promotion of an increased innovation capacity, the modernisation and diversification of NSPA economies, the improvement of quality of life in different parts of NSPA regions and enhanced transport connectivity.



Source: I. Miles (2002)

**Figure 1: The foresight cycle**



**Figure 2: Issues identified as being of particular relevance for the NSPA Vision and Foresight**

An analytical report was produced on this basis, compiling quantitative and qualitative analyses of specific relevance in a foresight and visioning perspective. This was meant as a complement and update of the previous Nordregio report *Northern Peripheral Sparsely Populated Regions in the European Union and in Norway*<sup>2</sup>, published in 2006. The objective was however not to produce a new or extended version of this report, nor to develop extensive additional quantitative analyses. Instead, the purpose of the analytical report was to provide a factual basis for discussions, especially allowing the NSPA representatives to compare their respective home regions with other areas.

The process of formulating a vision and foresight started with the organisation of two two-day workshops in Stockholm, respectively September, 11<sup>th</sup>-12<sup>th</sup> and October, 16<sup>th</sup>-17<sup>th</sup> 2008. These workshops gathered participants from all NSPA regions, the European Commission and the Swedish Ministry of Enterprise. In addition, two representatives from the Greenland home rule participated as observers, considering the NSPA Foresight exercise as a possible source of inspiration for their local economic and social development strategies. Finally, the Sweco Eurofutures consultant Hallgeir Aalbu was invited to provide external inputs to the discussions based on his extensive experience of Nordic and European regional policies.

The first workshop comprised three stages. First, some introductory presentations by the initiators of the project, the Commission and Nordregio set the stage. Second, four parallel workshops were organised, addressing the same type of general questions but with a focus on specific thematic foci:

- New growth sectors in the NSPA: what could they be? What is needed for their development?
- Sustainable development perspective in smaller towns and settlements
- Urban areas as economic motors for the entire NSPA
- Innovation in the NSPA: internal strengths and external networking

Third, a plenary session was organised to present results from the various workshops and challenging all the ideas for measures produced through a “wild card” exercise. This means that participants were asked to answer the following questions:

- What could happen that would make all your work today irrelevant?
- What could “change the rules” for NSPA, or for that matter, for Europe?
- What are your greatest hopes/fears?

---

<sup>2</sup> Northern Peripheral, Sparsely Populated Regions in the European Union and in Norway. Erik Gløersen et al. 173 pp. (Nordregio Report 2006:2) ISBN 91-89332-60-1.  
<http://www.nordregio.se/Files/r0602.pdf>

Between the first and second workshops, participants were invited to reflect upon and evaluate ideas generated in workshop one and to discuss them in their respective home organisation and networks on the basis of a set of questions sent out to them.

The first session of the second workshop was devoted to collecting this feedback, with some key inputs from regional, national and European stakeholders as well as an external perspective on the process. This helped preparing the visioning session, during which participants were invited to formulate of a broadly anchored picture, idea, complete view of a desired future state for the NSPA that would meet the following criteria:

- internal consistency
- realism
- ability to direct energy
- functioning as a basis to defining more concrete objectives and strategies.

This was followed up through group discussions focusing on issues considered particularly important to develop based on the inputs from Workshop 1:

- Education, Research, Development
- Natural resources
- Transport and connectivity
- Cultural and human capital

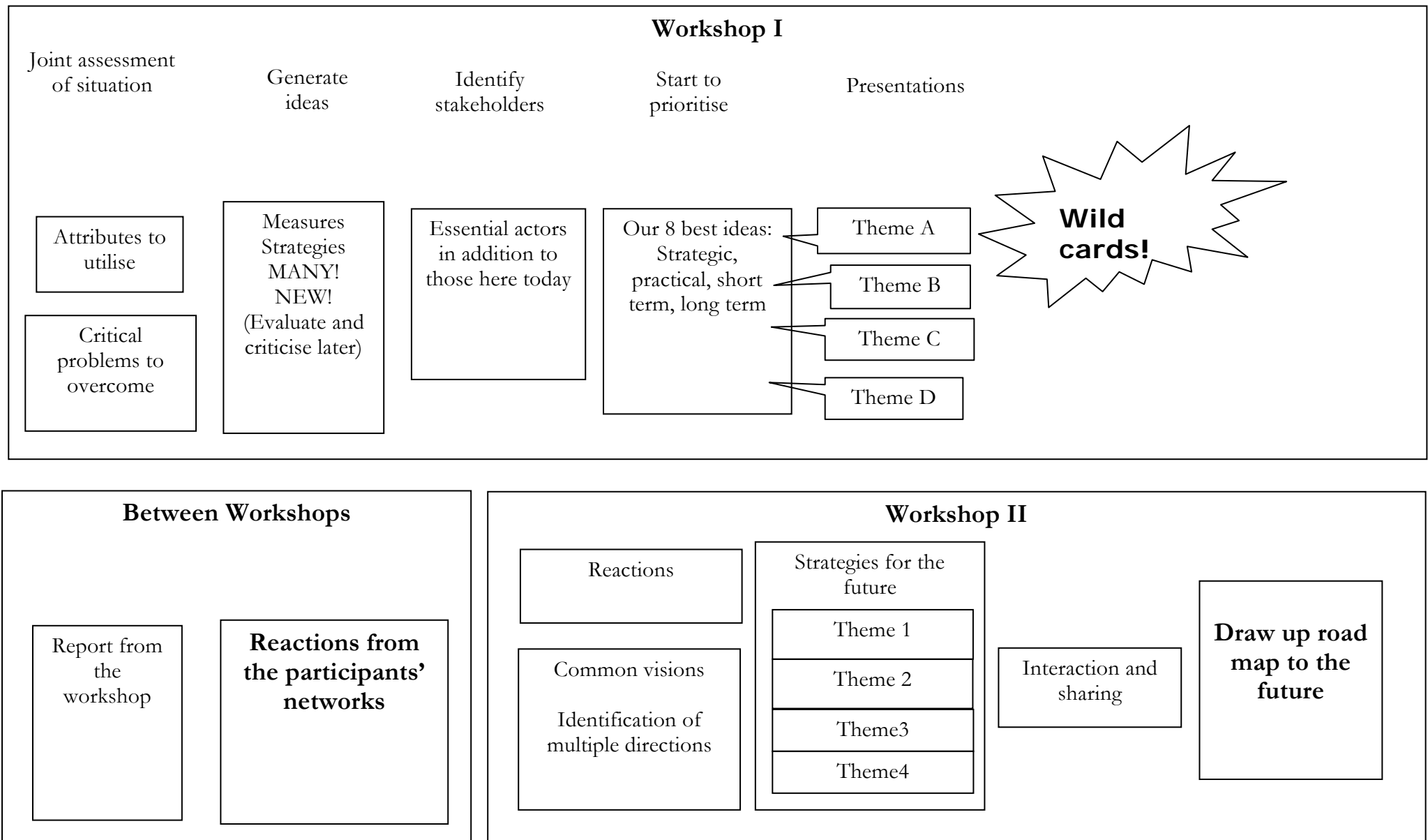
The objective was to sort generated ideas into action categories, in view of giving them preliminary priorities. The exercise also provided inputs to the policy road map, including a clearer assessment responsibility and governance issues to be clarified for this purpose.

In addition to the workshops, two meetings were organised. First, a separate workshop in the Finnish border town of Tornio allowed the foresight process to benefit from additional inputs from senior officials, politicians and researchers, applying the same type of methodology as in Workshops 1 and 2. Second, a meeting with transport and infrastructure specialists from the NSPA focused specifically on development perspectives within this thematic field<sup>3</sup>.

Overall, the Foresight and Vision is therefore the result of a structured exchange and dialogue between regional actors, with inputs from national and European stakeholders. The purpose is to provide a basis for further action focusing on the growth potentials of the NSPA, in a European and global perspective and based on principles of sustainable development.

---

<sup>3</sup> Mårten Edberg (Region Västerbotten) Mikael Bergström (Västerbotten county council), Jimmy Bystedt (Norrbotten county council), Anne Berg (Nordland county council), Per Strømhaug (Nordland county council), Bjørn Kavli (Troms county council), Jussi Rämetsä (Regional Council of Central Ostrobothnia)



Susan Brockett - Nordregio

**Figure 3: Process overview**

**Table 1: List of participants at NSPA Foresight workshops  
11<sup>th</sup>-12<sup>th</sup> September and 16<sup>th</sup>-17<sup>th</sup> October 2008**

Office	Name	Affiliation	Function	WS 1	WS 2
<b>North Finland</b>	Allan Perttunen	North Finland EU Office	Director	no	yes
	Seppo Heikkilä	North Finland EU Office / Oulu university	Fundraising manager	yes	yes
	Suvi Tuhkanen	North Finland EU Office	Special Advisor	yes	yes
	Esko Lotvonen	Regional Council of Lapland	Executive Director	yes	yes
	Kari Aalto	Council of Oulu Region	Manager of International Affairs	yes	yes
	Ilpo Tapaninen	Council of Oulu Region	Regional Planning Manager	yes	yes
	Anne Pesola	Regional Council of Central Ostrobothnia	Programme Manager	yes	yes
	Pauli Harju	Council of Oulu Region	Regional Mayor	no	yes
<b>East Finland</b>	Mika Rantakokko	University of Oulu		no	yes
	Riikka Railimo	East Finland EU Office	Director	yes	yes
	Ulla Äänismaa	East Finland EU Office	Office Assistant	Yes	yes
	Kimmo Niiranen	Regional Council of North Karelia	Regional Officer	yes	yes
	Jarmo Vauhkonen	Regional Council of Etelä-Savo	Director, Regional Planning	yes	yes
	Jyrki Haataja	Kainuu region	Coordinator	yes	yes
	Pentti Malinen	Kainuu region	Program Director	yes	yes
	Riitta Koskinen	Regional Council of Etelä-Savo	Director, Regional Development	yes	yes
<b>North Norway</b>	Jussi Huttunen	North Savo	Executive Director	yes	yes
	Stein Ovesen	North Norway EU Office	Director	yes	yes
	Benedicte Solaas	North Norway EU Office	Consultant	yes	yes
	Arne O. Holm	Troms fylkeskommune	Head of a think tank	yes	yes
	Edd-Magne Torbergsen	StatoilHydro	Spokesperson	no	yes
	Erlend Bullvåg	Høgskolen i Bodø	Researcher	yes	yes
	Eirik Fiva	Landsdelsutvalget	Director	no	yes
	Jan Terje Henriksen	Nordområdesenteret	Researcher	yes	no
	Pia Svensgaard	Troms fylkeskommune	Fylkesråd - Politician (Arbeiderpartiet)	yes	yes
	Jan Roger Iversen	Universitetet i Tromsø	Strategy Manager	no	no
	Kjell Kolbeinsen	Sparebanken Nord-Norge	Kommunikasjonssjef	yes	no
	Morten Brattvoll	Universitetet i Tromsø	Rådgiver	yes	no
	Trud Berg	Nordland fylkeskommune	Fylkesråd - Politician (Arbeiderpartiet)	yes	yes

Office	Name	Affiliation	Function	WS 1	WS 2
Mid Sweden  9 repr	Anna-Carin Christoffersson	Mid Sweden Office	Director	yes - day 2	yes
	Agneta Sörman	Cooperation Västernorrland	Project leader	yes	yes only Friday
	Anders Söderholm	Mid Sweden University	Chancellor	no	no
	Jens Nilsson	Östersunds kommun	Kommunalsråd - Politician (socialdemokraterna) - Chairperson Europaforum	yes - day 2	no
	Thomas Andersson	Landstinget Jämtlands län	Politician (centern)	yes - day 2	yes
	Ulrika Åberg	Länsstyrelsen i Västernorrlands län	Direktör	no	no
	Glenn Nordlund	Örnsköldsvik kommun	Vice ordförande Kommunstyrelsen - Politician (centern)	yes	yes
	Jan Sahlen	Landstinget Västernorrland	Regional Tillväxtchef	yes	yes
	Hans Halvarsson	Länsstyrelsen Jämtlands län	Avdelningschef	no	yes
North Sweden  12 repr	Inge Andersson	North Sweden EU Office	Director	yes	no
	Eva-Maj Karlsson	Vindeln kommun	Kommunalsråd - Politician (centern)	yes	yes
	Anna-Stina Nordmark Nilsson	Association of Entrepreneurs, Företagarna	CEO	yes	no
	Robert Forsberg	Municipality of Kalix	Kommunalsråd - Politician (socialdemokraterna)	no	yes
	Erik Bergkvist	Region Västerbotten	Chairperson of the board - Politician (socialdemokraterna)	no	yes
	Thomas Westerberg	Region Västerbotten	Ansvarig för regional planering	no	yes only Thursday
	Staffan Borg	County administration	Ledningsstöd / Samordningsansvarig länsstyrelsens stab	yes	yes
	Ulf Wiberg	Umeå University	Professor ekonomisk geografi	yes	yes
	Maria Östensson	Länsstyrelsen Västerbotten	International coordinator	yes	yes
	Gun-Karin Karlsson	Västerbotten chamber of commerce - Lycksele office	Director of regional office	no	yes
	Lisa Dahlén	Luleå Technical University	Researcher, Waste Science and Technology;	no	yes
	Lars-Anders Baer	Sametinget	Chairperson of the board - Politician (Samelandspartiet)	yes	no
	Anna Olofsson	Ministry of Enterprise, Energy and Communications Division for Regional Growth	Enheten för Regional tillväxt, Näringsdepartementet	no	yes
	Anna Lindberg	Norrbottens läns Landsting	Utredare	yes	yes

Office	Name	Affiliation	Function	WS 1	WS 2
<b>Greenland</b>	Freia Lund Sørensen	Greenland home rule -Ministry of Infrastructure and Environment	AC-Fuldmægtig	yes	yes
	Steen Jeppson	Greenland home rule -Ministry of Infrastructure and Environment	Projektmedarbejder	yes	no
<b>European Commission</b>	Virve Vimpari	DG REGIO – Unit H2 Estonia, Finland and Latvia	Programme Manager	yes	no
	Gabriella Fesus	DG REGIO – Unit C1 Conception, forward studies, impact assessment	Policy Analyst	yes	no
	Björn Hegefeldt	DG REGIO – Unit H3 – Lithuania, Sweden and Denmark	Programme Manager	no	yes
	Agnes Kelemen	DG REGIO – Unit C1 Conception, forward studies, impact assessment	Policy Analyst	no	yes
	Alain Roggeri	DG REGIO – Unit H2 Estonia, Finland and Latvia	Head of Unit	no	yes
<b>Nordregio</b>	Erik Gløersen	Nordregio	Research Fellow	yes	yes
	Susan Brockett	Nordregio	Research Fellow	yes	yes
	Johanna Roto	Nordregio	GIS/Cartography Coordinator	yes	yes
	Alexandre Dubois	Nordregio	Research Fellow	yes	yes
	Rasmus Ole Rasmusssen	Nordregio	Senior Research Fellow	yes	yes
	José Sterling	Nordregio	Research Assistant	yes	no
	Jon M. Steineke	Nordregio	Research Fellow	no	yes
	Stefanie Lange	Nordregio	Research Assistant	yes	yes
	Anu Henriksson	Nordregio	Research Assistant	yes	yes
<b>SWECO Eurofutures</b>	Hallgeir Aalbu	Eurofutures	Consultant	no	yes

## 2. Towards a vision for the NSPA

The title of the present report, “*Towards a vision for the NSPA*”, reflects the fact that while significant advances have been made in the context of the process to identify and describe the existence of shared issues, challenges and opportunities, and to develop the awareness on the European significance of the NSPA notion, the formulation of the *NSPA Vision* remains a continuous and ongoing process.

It has in particular not been possible to propose cartographic visions representing desired territorial organisations of the NSPA in 2020. This is partly due to differences in perspectives among local and regional stakeholders, e.g. with regards to the organisation of transport infrastructure and flows. More importantly, it however appears that the visioning process participants did not primarily focus on the need for concrete changes in the spatial organisation of the NSPA. Instead, notions such as the development of transversal connections, the increased coherence of regional transportation networks or the need for more balanced and sustainable local communities were highlighted as guiding principles for development without leading to an *ex ante* identification of the concrete changes to be made on this basis. While the need for ambitious infrastructure strategies in the NSPA was mentioned by many participants, the foreseen improvements therefore cannot be synthesised through an overall cartographic vision for the NSPA in 2020.

This difficulty of mapping a future vision for the NSPA however does not imply that the NSPA is territorially undifferentiated. Quite to the contrary, areas with intense growth and decline coexist, both in economic and demographic terms. Even within municipalities, individual localities have shown contrasted development patterns; these polarising trends at different regional and local scales are expected to continue over the next decades. An overarching theme for an NSPA vision is therefore the combined management of growth and decline, in view of preserving the communities from excessive fluctuations and creating the conditions for a harmonious long term development.

## **The role of quantitative evidence and maps**

The following sections present key themes addressed and strategic objectives identified in the workshops. Maps showing current geographical structures and planning approaches are included as additional explanations and illustrations of the rationale behind the approaches and objectives that are advocated. Some of these, especially when it comes to demographic changes, are graphic illustrations of trend data. This exercise has however not been based on extrapolations from past trends. Various factors justify this choice. First, the focus of the exercise has been on establishing a shared NSPA Vision for growth and sustainable development based on the perceptions of the actors, rather than on quantified scenarios. Quantified evidence has therefore only been produced insofar as it can facilitate the dialogue among NSPA actors and stakeholders or increase the intelligibility of the opinions they express for external observers.

Secondly, main trends such as the population decline or as the changes in the employment structure of NSPA processing and extraction industries are well known; quantifying them further would provide a limited added value from a policy making point of view. Because of the high quality and continuity of the statistical observation of regional trends in Finland, Norway and Sweden, the general political debate has been evidence informed to a larger extent than in other parts of Europe. There has been a strong political awareness of the observed trends in the more peripheral and sparsely populated parts of each country, even if many regional stakeholders consider the policy responses to be insufficient.

Thirdly, and most importantly, the vision focuses on opportunities for change in the NSPA. Trend scenarios based on previous evolutions from the 1980s onward often lead to unnecessarily pessimistic future perspectives for the NSPA, which need to be considered against recent factors of change. Typically, demographic projections produced by national statistical institutes generally conclude on a continued demographic polarisation and overall regional population losses. The degree to which such projections can inform policy making, insofar as their hypothesis with regards to fertility, life expectancy, in- and out-migration are not considered in detail, is however limited.

Furthermore, extrapolations may not be made from trends from the mid-1990s onwards in Finland and Sweden. The recovery from the profound economic crisis in these countries indeed implied a range of structural changes in institutional and economic systems. A snapshot of the current situation therefore in many respects provides a more intelligible picture of the

development opportunities and challenges of the NSPA, whereas trend data require extensive contextual and historic knowledge.

### **The added value of an NSPA Foresight and Vision exercise**

The types of concerns reflected by the themes addressed in this chapter are generic to most regional development policies. Aspirations for balanced demographic development, stable economic growth and improved coherence in transportation systems do not differentiate the NSPA from other regions. The added value of the foresight and vision exercise first lies in the formulation of strategic objectives in a 2020 horizon. These both reflect the perspectives on NSPA opportunities and challenges expressed by workshop participants and their knowledge of political contexts in which potential responses would have to be designed and implemented. The perspective on the NSPA in 2020 is therefore inseparable from the understanding of current structural obstacles to growth and sustainable development in the NSPA.

The second type of added value resides in the hierarchy of sub-objectives established in the workshops. These were specifically designed to encourage participants to choose and prioritise among the measures and ambitions considered potentially beneficial for the NSPA, as open brainstorming session were followed by more comprehensive critical approaches as well as voting and selection processes.

Finally, an important element in the vision is the positioning of the NSPA space in a wider context, identifying the role workshop participants would like their region to play in European and global economic production systems and their potential place in a wider institutional and social interplay at the international level. Through their export oriented economies, NSPA regions have a tradition of being directly exposed to the world economy. Regional economic actors participate in many international networks of commercial exchange, cooperation and ownership that are not organised through respective national capital regions. As such, they constitute a specific type of periphery in the European context; the development strategies they formulate may be of relevance not only for the NSPA as such, but also for other rural or sparse regions that ambition to improve their economic situation through an enhanced and improved integration in world economic circuits.

## **Organisation of the present synthesis**

The description of the vision starts with the demographic dimension, considered as the core challenge for the NSPA regions. The first question is how one may transform the ambition of stable or growing population figures into operational policy measures. The following section deal with the closely connected ambition of achieving sustainable and balanced local communities: what are the current elements of imbalance? How may they be addressed? Here gender and multiculturalism appear as core issues.

It is however important to keep in mind that the NSPA is highly differentiated space, with a number of rapidly growing cities. The planning issues vary accordingly, and the future of urban areas raises specific hopes and concerns. From a regional development point of view, there is a need to carefully identify the role cities can and should play in an overall economic development process: is it at all possible to combine intense urban growth with a territorially balanced development in the NSPA? This issue is particularly important in the context of a European dialogue on territorial development, as NSPA towns cities in many cases do not develop the same types of interurban networks and urban-rural relationships as their counterparts in more central parts of the continent.

Given this backdrop in terms of NSPA geographical structures, one may more easily understand the economic development ambitions of the NSPA, focusing on the need to create “robustness” at the level of individual communities. This implies that new thinking is needed in terms of the territorial organisation of research innovation processes, making it possible to develop world leading activities within specific niches in all parts of the territory. Sustainable tourism provides an important additional basis for economic viability in many communities, and these success stories need to be reproduced in more areas.

Finally, the key role of transportation systems when it comes to making this range of ambitions possible justify its final position in the description of the vision, as the keystone of the system of measures allowing the NSPA regions exploit their economic potentials fully.

# Controlled demographic trends

A majority of NSPA regions have experienced demographic decline over the last decades. The main demographic challenge however stems from the intense polarisation within NSPA regions. Between 1992 and 2007, only 15 out of the NSPA's 189 labour market areas have experienced population growth (Figure 4). Population decline has been particularly intense in a large number of small labour market areas, falling below critical thresholds for the balanced development of local communities, both in terms of service provision and in view of preserving the long term sustainability in the offer and demand for labour.

The processes of demographic decline tend to be self-reinforcing, insofar as the attractiveness of areas decline when population falls below critical thresholds for service provision. Strikingly, settlement population growth in recent years (2002-2005) is almost systematically observed within commuting distance of towns or cities of more than 10,000 inhabitants (Figure 12). The main exceptions concern coastal settlements in Norway, especially due to the geographic spread of fish farming activities, and a small number of mining or tourism areas in Finland or Sweden.

There are therefore not one but multiple demographic visions for the NSPA in 2020 that were formulated in the workshops. In areas of intense growth, the vision concerns the control of land use and improvement of urban qualities (see below). In some currently declining parts with particular economic potentials, workshop participants would like to see new models to generate more balanced communities, which in spite of their small size manage to create attractive living conditions for men and women and for all age groups. They however do not consider the preservation of current settlement patterns as an objective *per se*. It was on the contrary argued that it is necessary to accept demographic decline in some parts, when it corresponds to a necessary adaptation to a changing economic context.

The reliance on market mechanisms to distinguish settlements to be maintained from those that are not viable may however not be a sufficient basis for a long term sustainable development strategy. Future needs in terms of natural resources, e.g. renewable energies, may create a renewed economic viability for some types of settlements. Considering the social cost of closing down existing settlement, and of establishing new ones, a long term strategic settlement policy is needed. The challenges in this respect are multiple, as both the principles and the governance model on which such a policy would be based need to be defined. The

workshop discussions however made it obvious that overcoming the current fatalistic attitude to demographic trends requires the formulation of an operational settlement policy.

Opening a European debate on the importance of settlement patterns in promoting a socially, ecologically and economically more robust development could make it possible to progressively establish more coherent and comprehensive positions in these matters. At the European level, one could more easily disconnect discussions from the concrete issues of demographic growth or decline in individual regions or localities, and focus on the general framework and principles for a policy dealing with settlement structures. The output could first of all provide added value to the understanding of territorial cohesion at the European level, by demonstrating that the long term exploitation of territorially grounded natural resources requires a human presence, and therefore cannot be considered independently from wider social and economic dynamics. Secondly, the formulation of European principles for a settlement policy could act as a catalyst of a renewed dialogue between local, regional and national authorities in the NSPA on the need for policy responses to demographic trends. In the same way as the reference to “polycentricity” in the European Spatial Development Perspective (ESDP)<sup>4</sup> has had a significant impact on the perspectives and objectives of planning documents at all territorial levels, especially in urban and more densely populated regions, the adoption of European principles for settlement patterns could have an impact on development perspectives in sparsely populated areas.

This would be in line with current European policy debates on the adequate responses to demographic decline, which have recently gained momentum as ageing and depopulation is becoming an issue for a wider range of countries with low birth rates and a continued concentration of population in metropolitan areas. Scientific reports and policy documents around the notion of “shrinking regions” illustrate this phenomenon. The NSPA have a particular role to play in these European discussions on demographic trends, based on the experience accumulated over the past decades on how to handle local population decline and ageing. The concrete solutions developed in the NSPA, e.g. in terms of innovative service organisation, telemedicine and public transportation, may for example be a source of inspiration for a growing number of European regions. Profiling NSPA regions in this way is also a way of putting demographic issues on the political agenda, and promoting a more proactive European attitude to these forthcoming challenges.

---

<sup>4</sup> [http://ec.europa.eu/regional\\_policy/sources/docoffic/official/reports/som\\_en.htm](http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/som_en.htm)

Rather than necessarily aiming for a certain level of population growth, the NSPA vision expressed in the workshops implies that local and regional authorities would like to be drivers of demographic evolutions, rather than perceiving them as an externally imposed constraint. The objective is to define the settlements structures that are politically desirable and practically feasible, e.g. based on socio-economic, cultural and ecological arguments, and to implement sufficiently effective incentives to achieve these objectives. In the design of policies, it is important to keep in mind the diversity of settlement structures in the NSPA, from the highly rural and dispersed pattern of East Finland to the concentration in small to medium sized towns in the Swedish inland and along much of the Norwegian coast. A case-by-case approach is therefore needed to define strategies for sustainable demographic development.

### **VISION 2020**

**The NSPA is successfully implementing a strategy for sustainable demographic development in all regions.**

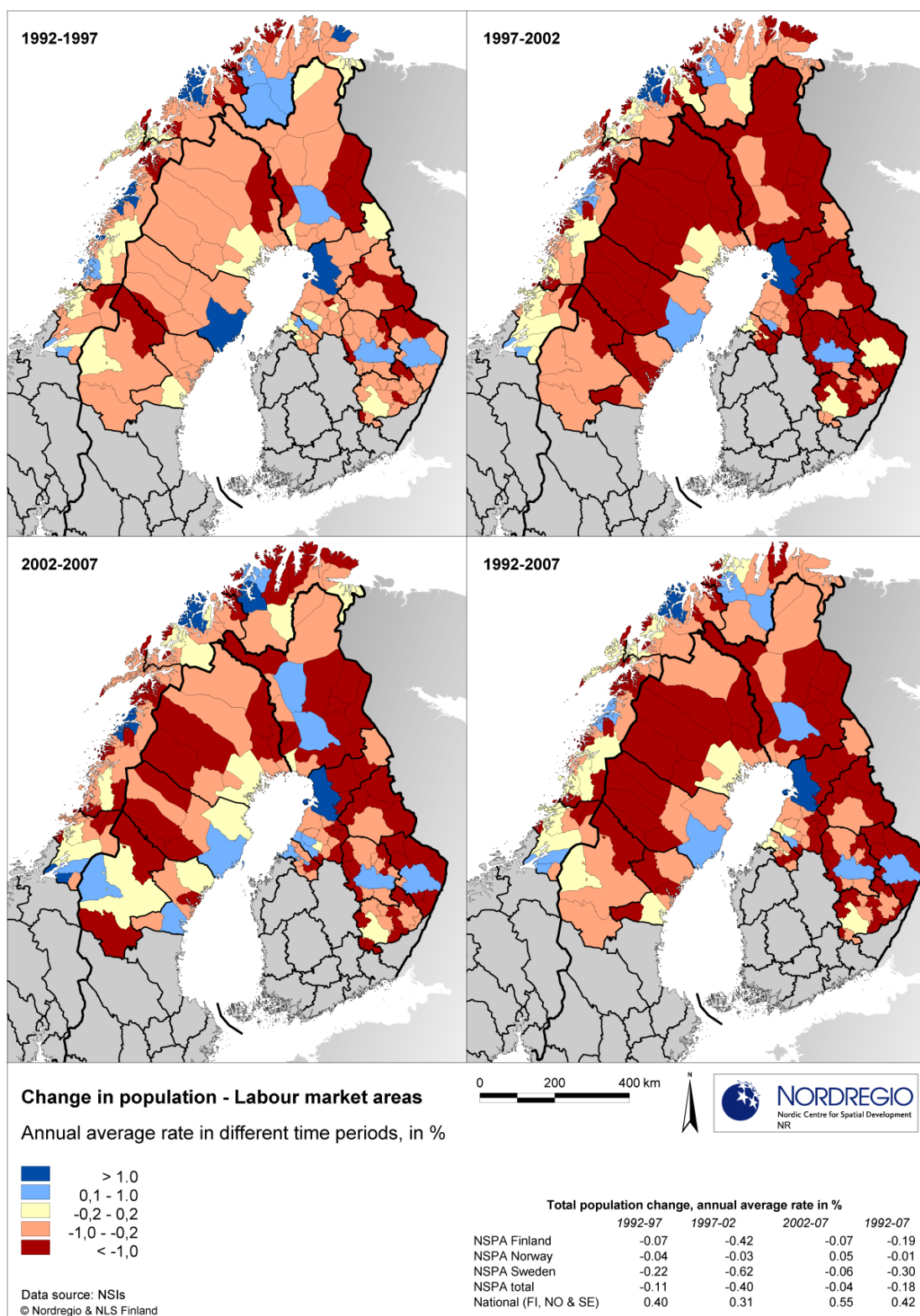
**In areas where demographic decline is considered to be a necessary adaptation to economic changes, the progressive reduction of population is accepted. There is an explicit strategy to handle this situation, ensuring that remaining citizens have an appropriate service provision. Specific policies deal with settlements that go from being living communities to seasonal leisure housing areas.**

**In localities aiming for the stabilisation or growth of their population the incentives available make it possible to reach these objectives. The conditions to achieve an economic viability in these areas have been clearly identified, and concrete strategies are being implemented to meet them. This implies that local actors, including associations, local interest groups, entrepreneurs, politicians and civil servants, are being mobilised in collective efforts to identify development potentials and to mutualise existing resources.**

**Local authorities in areas where a long term strategy to achieve demographic, social and economic sustainability can be formulated in other words have the capacity to implement corresponding actions. This empowerment of viable localities is a guiding principle when defining the modes of interaction with European, regional and national institutions.**

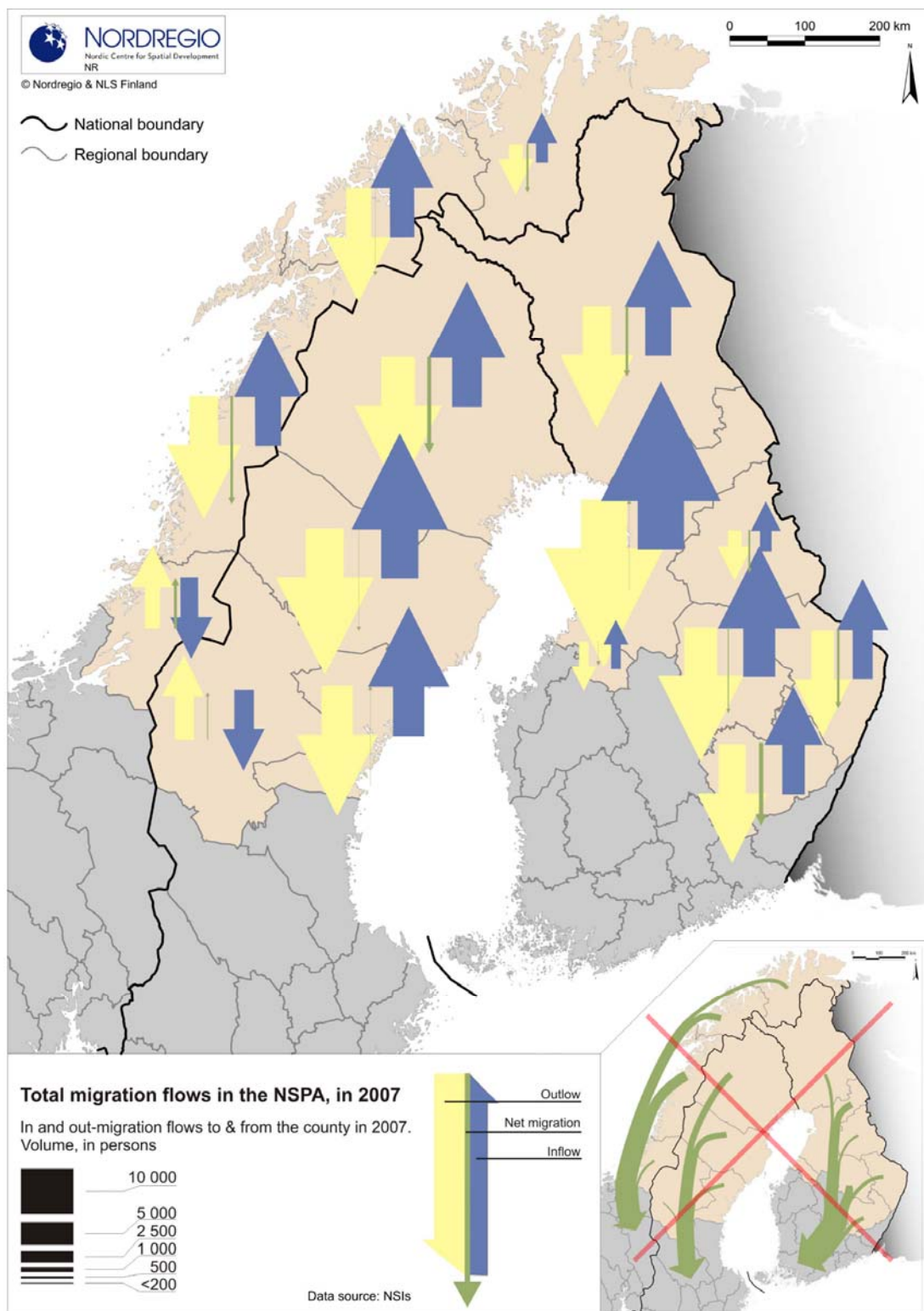
### Policy measures

- A better differentiation of NSPA spaces;
- Accepting depopulation in some parts of the NSPA - creating detailed strategies to handle the progressive decline in population and the possible transformation into leisure housing areas;
- Establishing principles for a long term strategic settlement policy, possibly as a component of European territorial cohesion policies and leading to the funding of incentives making it possible to reach the commonly agreed objectives;
- Actively using the NSPA as a European test-lab on how to handle continuously declining population figure within certain functional areas, especially in terms of public service provision;
- Promoting innovative solutions to handle a sparse and often declining population, e.g. in terms of service organisation, telemedicine and public transportation;
- Creating regional frameworks for the emergence of local coalitions of actors capable of designing development strategies, actively promoting their implementation and mutualising existing resources;
- Promoting projects that challenge preconceptions on the types of activities that may create an economic livelihood and long term employment opportunities in NSPA regions.



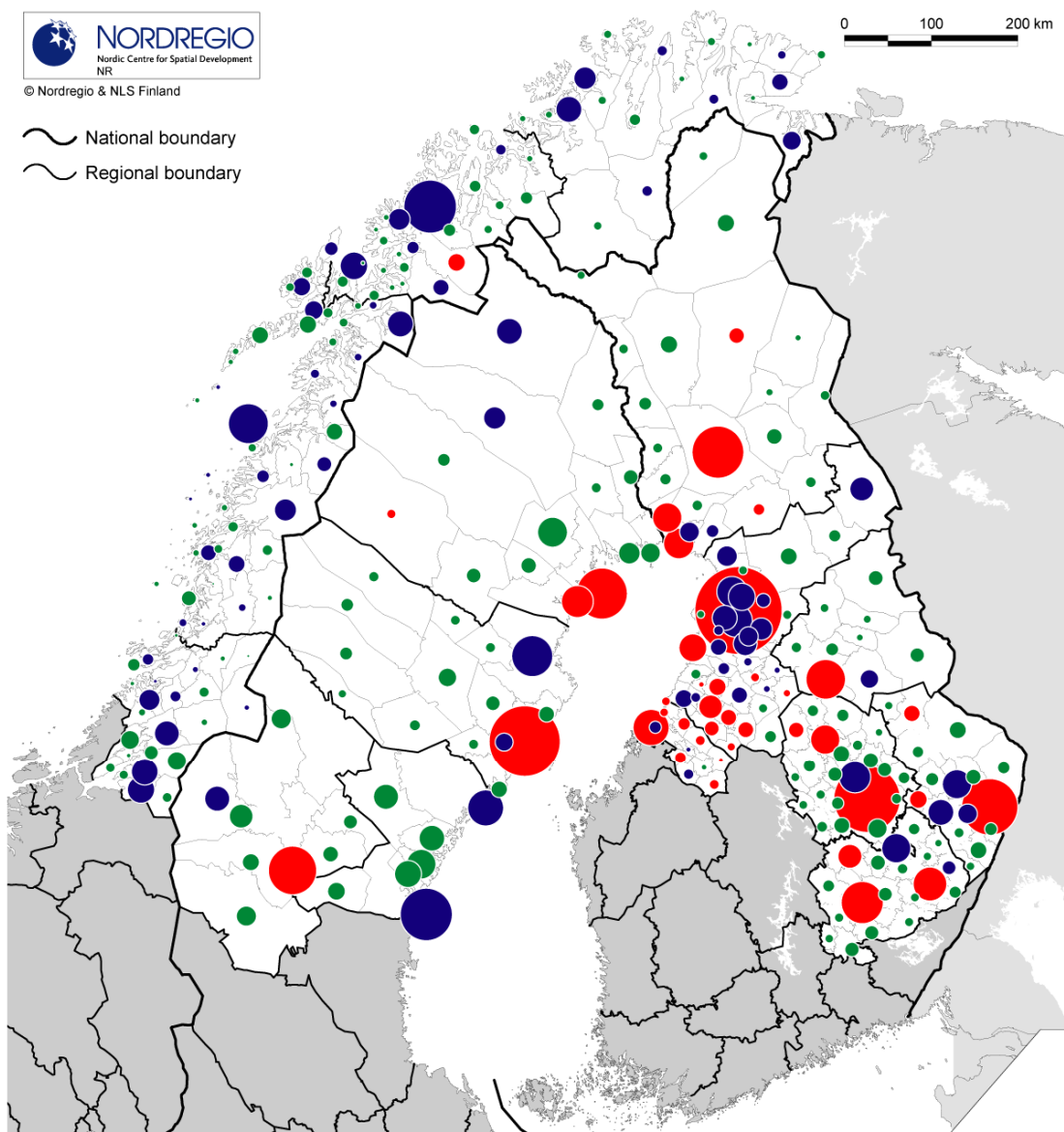
**Figure 4: Demographic trends in NSPA Labour markets – 1992 to 2007**

*Only 15 out of the NSPA's 189 labour market areas have experienced population growth between 1992 and 2007. The vision for the NSPA is not to turn these trends in all areas, but to achieve sustainable regional demographic development. One component of this is to implement successful strategies for population growth in designated areas, and to organise the decline in other parts.*

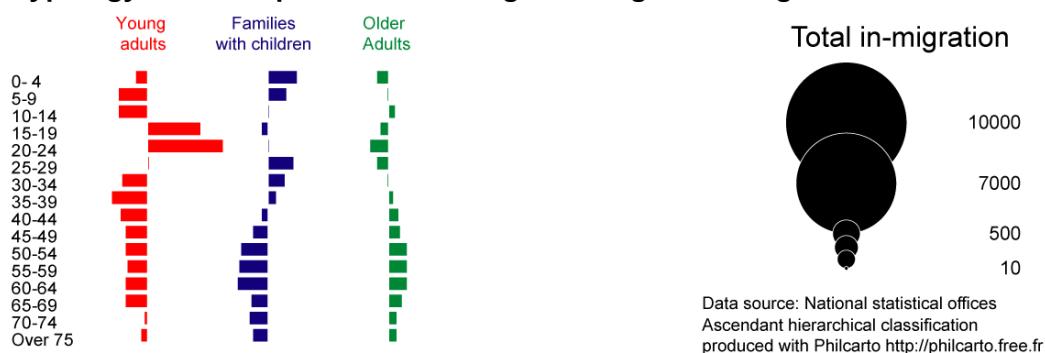


**Figure 5: In-migration to the NSPA**

Maps showing net population change such as Figure 4 and the bottom right representation of net flows with “centrifugal arrows” often wrongly convey the impression that the concerned regions or localities have a stock of population that is dwindling away. The implication would be that they are unattractive or economically unviable; actions to maintain population would consequently impose a settlement pattern against the prevailing preferences of the population. In fact, however, as shown here, net migration is a small imbalance between much larger in- and out-migratory flows. The number of in-migrants demonstrates that NSPA areas are considered attractive by many.

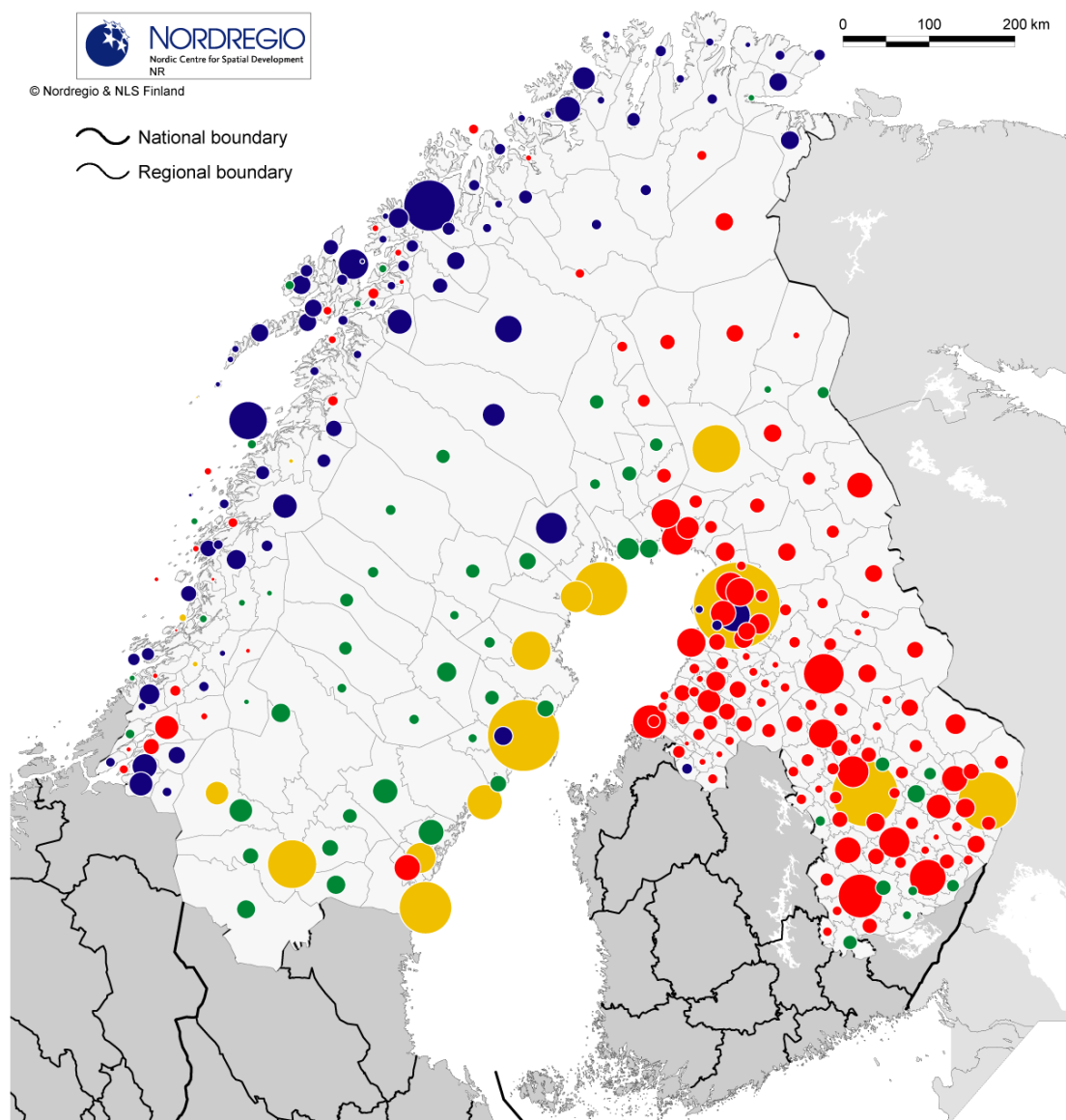


**Typology of municipalities according to the age of in-migrants**

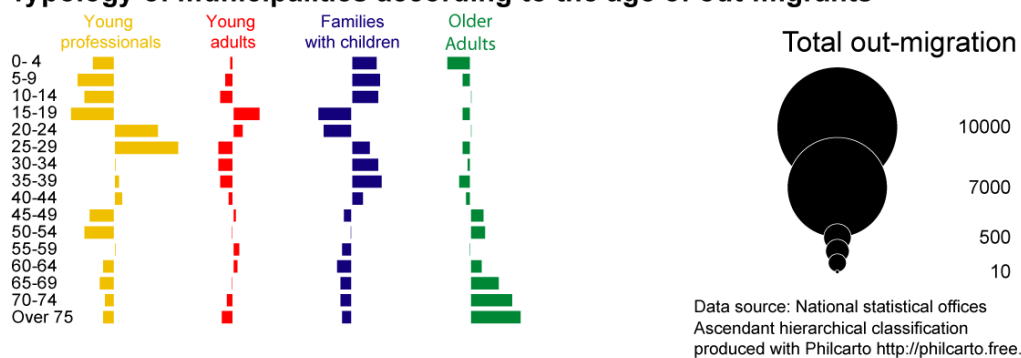


**Figure 6: Understanding and influencing migration:  
Typology of municipalities according to the age of in-migrants**

*In order to inverse the imbalances between in- and out-migration (Figure 5), it is necessary to identify the groups that contribute to each type flows. While the bulk of in-migrants in the most rural parts of the NSPA are young retirees, one finds a large number of families with children in Norway. This is due to the incentives for people to settle in these regions after their studies. Otherwise, the largest NSPA cities and towns attract young adults, mainly due to higher education opportunities.*



### Typology of municipalities according to the age of out-migrants



**Figure 7: Understanding and influencing migration:**

#### Typology of municipalities according to the age of out-migrants

*Applying the same method as for Figure 6 to out-migrants, one finds four main categories of municipalities. Young professionals move out of the large Finnish and Swedish cities, after having finished their education. In Norway, in addition to these out-flow of young graduates, the families with children move out after having finished working the time needed to benefit from state incentives. Otherwise, young adults move out of the countryside to study or to find employment, as well as older retirees in need of more advanced care.*

# Balanced, dynamic communities

Most NSPA municipalities are characterised by a deficit of women, a larger proportion of older people and significantly lower shares of foreign born people compared to national average values. These demographic specificities can be considered both as symptoms and causal factors of imbalances in the concerned local communities. Failing to keep the young population and women or to integrate foreign born persons in sparsely populated and peripheral communities does not need to be a fatality. Inversing the negative trends however requires an in depth understanding of the situations leading to this type of phenomena.

The association of northern, peripheral areas to “male values” is deeply embedded in the industrial history of these regions. Value creation is typically associated with traditionally male-dominated primary activities such as mining and forestry or with processing industries. Female employment is often considered as being of secondary economic importance, especially when it is a part of publicly funded service activities. This distorted perspective on the functioning of NSPA local economies partly explains the lack of consideration for women’s professional potential. More generally, many women consider conservative male value judgements prevail in many NSPA local communities, especially with regards to economic development perspectives.

This contributes to a deficit of women that is increasingly problematic for the concerned communities, as women have a higher overall level of education and generally prove more apt to adapt to changing economic conditions. Creating more attractive environments for women in the NSPA would therefore not only improve the quality of NSPA social environments and their demographic sustainability, but also facilitate local entrepreneurial capacity-building.

The under-representation of young people in the NSPA outside the urban centres is not so much due to out-migration as to an insufficient return-migration after the end of higher education. Especially in periods of economic prosperity, young people from the NSPA find a job in the area where they are studying after graduation and do not to return to their place of birth. Even if there have been active policies to develop higher education facilities in the NSPA, discouraging young people from studying outside the NSPA does not appear as a long term solution.

The territorial organisation of higher education therefore creates a structural bias against many NSPA localities, whose effects are particularly strong in periods of economic prosperity. This implies that specific strategies to attract young people in these parts of the NSPA need to be implemented.

In the same way as for the overall demographic trends, the NSPA vision in a 2020 perspective is not based on a quantitative objective in terms of gender pattern or age structure, but focuses on the need to establish ambitious strategies that would start showing concrete effects within this timeframe. This also implies that new industrial investments made in the NSPA, e.g. in the mining sector, do not further accentuate local gender imbalances. The social responsibility of the concerned companies must therefore be highlighted; regulatory mechanisms need to be put in place to ensure that efficient and concrete measures are implemented to ensure that balanced communities in terms of gender and age emerge around new industrial sites.

More generally, new approaches of economic growth strategies are needed. In a knowledge and service based economy, traditional thinking inspired by “economic base theories” whereby exports of processing industrial or extraction activities create the livelihood of local communities is insufficient. State funded public services and export oriented knowledge activities or services indeed in many cases appear as a more stable and sustainable source of income. Fully integrating these ideas in development strategies would help challenging a traditional bias in favour of male dominated sectors. This could start a positive spiral, whereby new economic thinking attracts more women, who in turn could be driving forces for new types of entrepreneurship.

#### **VISION 2020**

**In all growth areas of the NSPA, the process of establishing balanced communities in terms of gender, age and cultural background is advancing.**

**The NSPA is regarded as dynamic and attractive living area, both inside and outside the regions, based on improved communication and branding.**

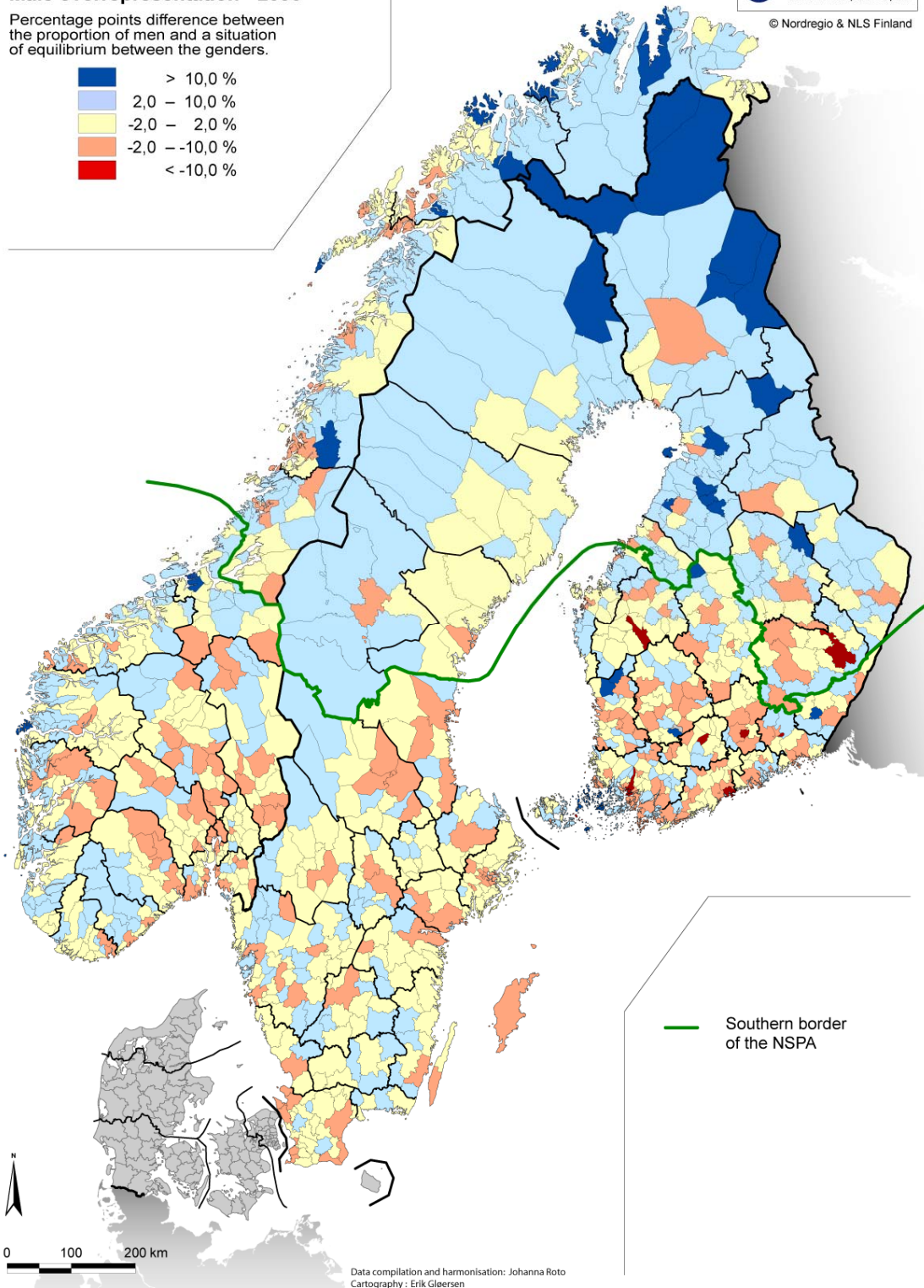
**The NSPA is building its economic development around balanced, viable and dynamic local communities, rather than letting demographic trends be determined by industrial initiatives.**

#### **Policy measures**

- Specific measures focusing on living conditions for women in the NSPA, emphasising their contribution to the economic viability of local communities.
- Encouraging the return of youth after education. Promoting youth projects as an essential component of the long term economic viability of NSPA communities.
- Attracting foreign workers and establishing strategies for their long term social integration in the NSPA.

### Male overrepresentation - 2006

Percentage points difference between the proportion of men and a situation of equilibrium between the genders.

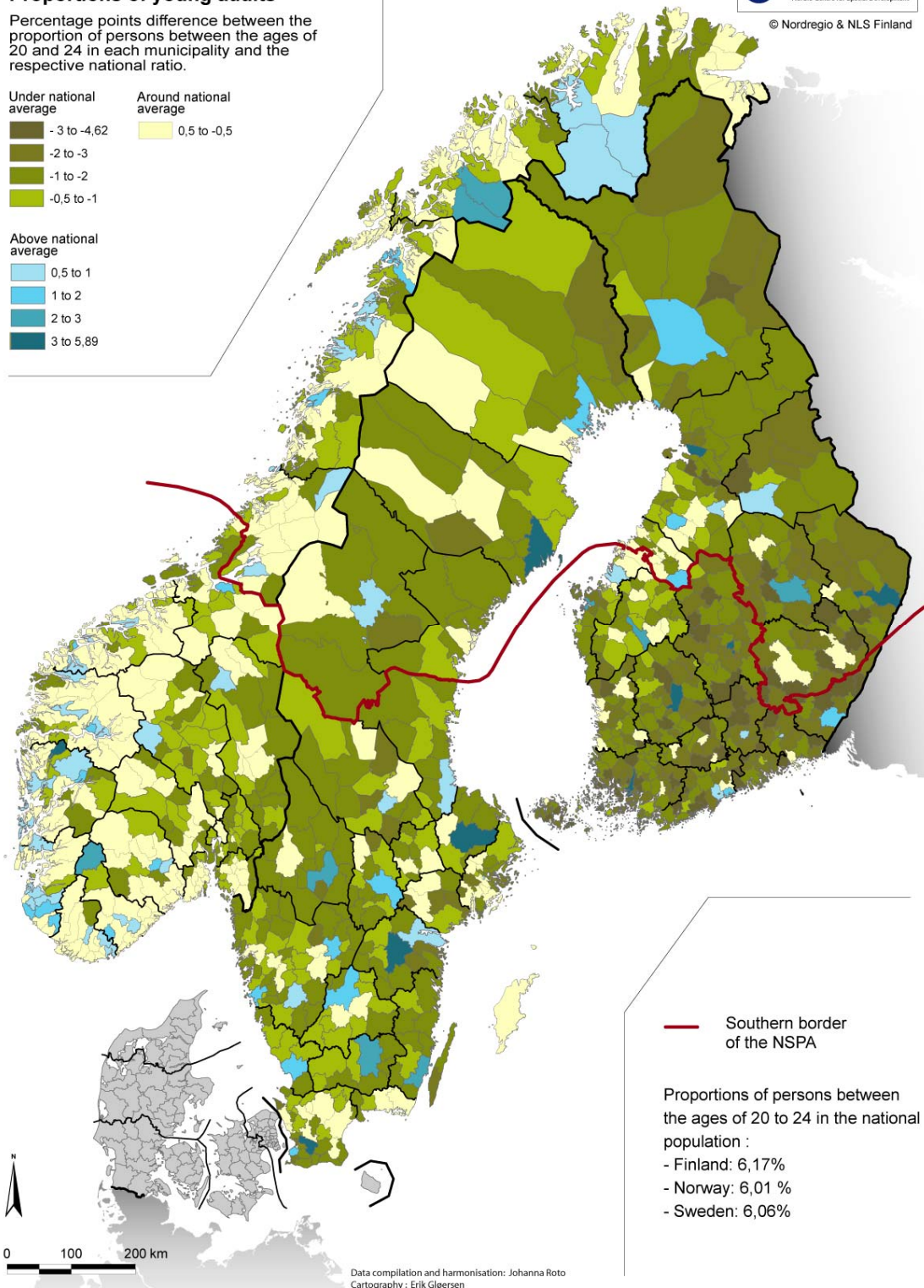
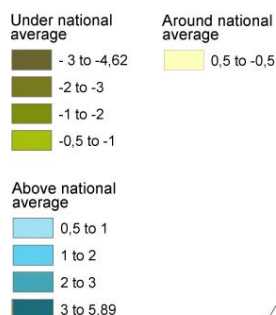


**Figure 8: Underrepresentation of women in rural parts of the NSPA**

*The lack of women is a symptom and factor of social imbalances in rural parts of the NSPA, with a significant impact on the concerned communities' ability to implement successful development strategies. A greater awareness of the gender bias in economic growth strategies is therefore an important component of the NSPA vision for 2020.*

### Proportions of young adults

Percentage points difference between the proportion of persons between the ages of 20 and 24 in each municipality and the respective national ratio.



**Figure 9: Underrepresentation of young adults**

*The under-representation of young adults (20 to 24 years old) is not an NSPA-specific phenomenon, but occurs to different degrees in rural parts of Finland, Norway and Sweden. The main difference is that the areas attracting young people are fewer and further away, creating an out-migration that tends to be more permanent. This is mainly due to the organisation of higher education, which creates a structural bias against balanced economic development in many NSPA localities.*

### **Text Box 1: Mining industry in Lapland**

The turnover of the Lapland Mining industry is currently about 60 million €, out of a total regional product of 9 800 million €. Three mines are in operation, the gold mines of Suurikuusikko (Kittilä) and Pahtavaara (Sodankylä) and the Chrome mine of Kemi, employing around 770 people. There is however a major potential for development in the mining sector. The extraction of phosphate, nickel, copper, iron, vanadium, palladium, platinum and other minerals could make it possible to create between 1 000 and 10 000 additional jobs in the Lapland mining sectors in a 2020 horizon. These employment opportunities would be in a range of different locations, many of which are isolated and have a limited population.

The Pajala-Kolari cross-border iron mine alone could generate 1800 jobs. Its development however requires the construction of a railway connection to Kemi.

The general challenge is to organise the extraction of these mineral resources so that the long term local and regional benefits are maximised. The inflow of funds stemming from new employment opportunities and additional tax income needs to be channelled so as to generate the basis for a long term sustainability of the local economies. The social equilibrium in local communities furthermore needs to be safeguarded.

### **Text Box 2: Ristijärvi Seniorpolis: a concept for senior citizens and a factor of enhanced innovation**

Imbalances between age groups can be used as basis for renewed economic development. Ristijärvi municipality, located in Kainuu region, has a particularly high share of elderly and retired people where almost 30% of municipal population is aged 65 year and over. Only two NSPA municipalities have a higher share, namely Rautavaara in Finland and Pajala in Sweden.

Ristijärvi has however chosen to approach this demographic challenge as an opportunity rather than as a threat. The municipality even seeks to increase the share of elderly, especially by encouraging return migration of retirees. The actions undertaken for this purpose emphasize the environmental qualities of the municipality and the high level of service provision for elderly people.

This is part of a local development strategy built around the concept of “Seniorpolis”: more service provision for elderly people gives additional job opportunities for younger people, which in turn improves the overall vitality of the municipality and increases the population in all age groups.

Seniorpolis is also a centre of expertise developing business operations that promote well-being and lifestyle opportunities for senior citizens. It works in cooperation with universities, research institutes, private and public companies and organizations. The main themes are education, housing, healthcare and recreation. The goal is to promote know-how, technology, product development and business concepts within different senior citizen services. The presence of numerous elderly people is in this way used as an asset for innovation.

Source: Seniorpolis – a unique Finnish concept for senior citizens (2008).

<http://www.seniorpolis.com/kuvat/Esite-Seniorpolis1.pdf>

# A more cosmopolitan NSPA

The lack of available labour force appeared as a significant limiting factor of the NSPA's economic development during the past years of strong growth. In addition to the above mentioned need to maintain and attract women and young people, the promotion of international in-migration has been mentioned in the workshops as a possible strategy to compensate for this shortage of labour. Economic benefits of in-migration from old and new Member States of the European Union, from Russia and from non-European out-migration countries have been identified in a number of NSPA localities. Workshop participants described the capacity of in-migrants to see opportunities in areas where locals only see limitations, to fill industrial positions otherwise left vacant and to revitalise local communities.

A more ambitious overall in-migration strategy is however required if one wants to systematise these examples of good practice and ensure that the economic advantages of in-migration are combined with a long term social integration.

The emergence of a more cosmopolitan NSPA should also be seen in relation with economic integration with Russia, leading to increased flows of persons and goods across the border

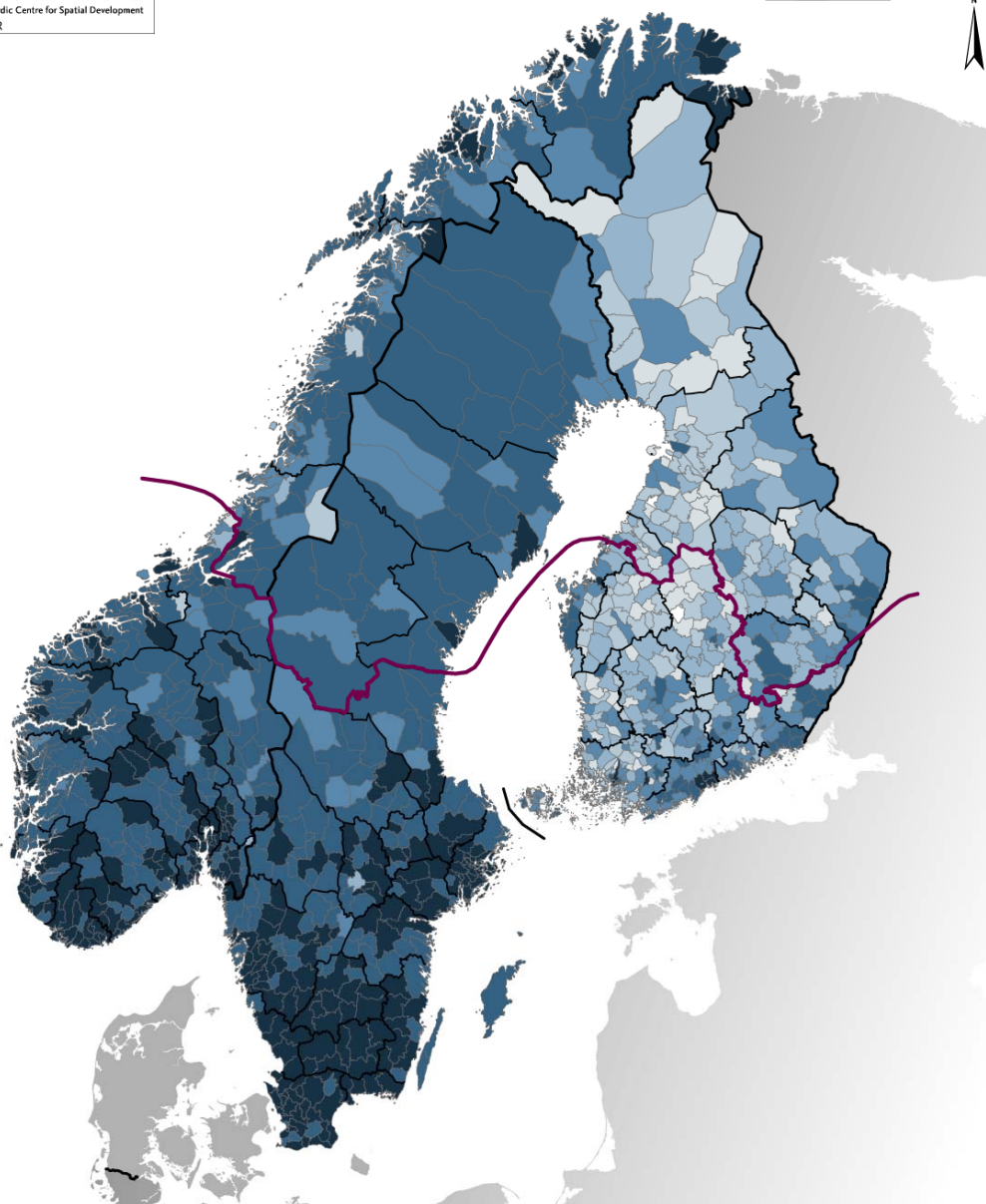
While the level of public service provision, the quality of the natural environment and the relatively high wage levels are important assets for the NSPA in this process, the capacity of small peripheral communities to integrate persons from a different social and cultural background needs to be improved. The objective is to promote an in-migration that brings added value to the communities as a whole, and not to import labour.

Workshop participants consider that this process of making the NSPA more cosmopolitan would also improve their attractiveness to women and young people, as it could help breaking down some traditional cultural and political schemes that are perceived negatively by these groups.

## **VISION 2020**

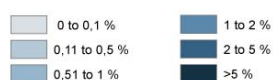
**While preserving their local traditions, the NSPA regions have become more internationally oriented and multicultural.**

**Cooperative administrative structures of national public and regional authorities across the border with Russia have created a foundation for the development of economic cooperation. In the long term, this cooperation will be the base for a common labour market that extends over both sides of the border. As the population of Northwest Russia becomes more prosperous, they also create consumer demand and the**



### Proportion of the population born in a Non-Nordic country

Proportion the municipal population born in a Non-Nordic country (2007)



Sources: National statistical institutes  
Figures may be underestimated in some municipalities, as foreign born populations of less than 5 persons do not appear in the statistics.

Erik Gløersen (2008)

**Figure 10: Underrepresentation of foreign-born persons**

*In-migration from non-Nordic countries is a possible strategy to compensate for the lack of available labour-force with adequate competencies in the NSPA. Currently, there is a south-north gradient in terms of proportions of persons born in a non-Nordic country, especially in Norway and Sweden. Finland has an exceptionally low overall immigration and highest values are to be found in the Helsinki regions. There are however some examples of small NSPA communities managing to attract significant numbers of foreign-born workers.*

businesses of NSPA stand ready to answer the call. The overall prosperity of the NSPA increases on this basis.

The integration of larger numbers of foreign born persons has had a particularly strong impact on the social environment in the rural parts of the NSPA.

#### Policy measures

- Identifying the economic needs for in-migrants and possible strategies to encourage persons with the appropriate competencies to move to the NSPA.
- Exchanges of examples of good practice on the social integration in NSPA local communities

#### Text Box 3: Finnmark immigrants returning to Russia

While Northern Norway expresses concern for the lack of available labour, the capacity to integrate workers from abroad appears deficient. Interviews with 35 women in the age group of 20 to 40 years and having migrated from the Kola Peninsula village Teriberka, close to Murmansk, to Båtsfjord in Norway, illustrates this. The reason for moving was the negative economic and social consequences of the break-down of the Soviet system, including the lack of alternatives. After a couple of year's involvement in the fishing industry of Båtsfjord, they however all returned to their place of origin. The reason invoked for migrating back was lack of acceptance, both professionally and socially. Often they were met with degrading attitudes, especially in relation to their competences. Several of them had both substantial education behind them and experience from leading positions. But in spite of that, they were continuously positioned at the bottom of the labour market structure. As a consequence they never became integrated. Originally they only saw the fishing industry as a starting point for a career, but they never managed to "take off" in the system, and consequently they chose to return to Russia.

Parallel interviews with local labour market representatives showed that these never became aware of the problems encountered by the in-migrants. Instead they saw the process as being "positive" because it provided cheap labour force in replacement of the missing Norwegian women. A major opportunity to develop a more dynamic development strategy was therefore missed.

Source: Aure, Marit (2008) *Arbeidsmigrasjon fra Teriberka til Båtsfjord 1999-2002*. Universitetet i Tromsø, Det samfunnsvitenskapelige fakultetet, Institutt for planlegging og lokalsamfunnsforskning.

# Improved urban qualities

Many NSPA cities have been growing intensely over the past decades, with population increases of for example +27 % in Oulu, +20 % in Tromsø, +15 % in Bodø and Alta and +10 % in Umeå between 1992 and 2007<sup>5</sup>. This leads to some concern in the workshops over the preservation of quality of life in the concerned urban areas, with regards to the access to nature and the quality of the architectural quality of built-up areas.

The rise in population figures has however also accentuated the degree of “urbanity” in these cities, expanding the range of services and creating living environments that are increasingly similar to those to be found in more central parts of the Nordic countries. The cultural dynamism of NSPA cities is also regularly highlighted, especially with regards to the number of festivals organised and the wide range of activities initiated by groups and associations. On the other hand, the leisure infrastructure is still considered insufficient, especially for sports.

The extension of functional of neighbourhoods, through longer commuting time or improved infrastructure, contributes to increase the population mass within individual cities. These changes in mobility patterns can be based on polycentric integration between neighbouring towns and cities, as for example in the Luleå region and in parts of East-Finland. It can however also take the form of a reinforced monocentric organisation around regional capital cities.

In both cases, these changes in mobility patterns make it possible to create more robust, and economically more sustainable, local labour markets. They indeed increase the mass and diversity of local economies, which in turn makes them more resistant to external shocks, such as cyclical fluctuations on worlds markets or financial crises.

NSPA cities generally do not function as regional economic growth motors beyond their commuting area, as few diffusion effects can be observed. However, the extensive commercial area developed in the cross-border town of Tornio-Haparanda, symbolised by the implementation of an IKEA store, epitomises a new type of thinking in terms of urban service provision in the NSPA. The consumer catchment area on which this development is based indeed covers most of the North Calotte and extends into Russia, including areas up to seven or eight hours drive away from Tornio-Haparanda. This high mobility of the NSPA population when it comes to non-daily services needs to be more explicitly integrated in development strategies, as an important specificity compared to other parts of Europe.

---

<sup>5</sup> These trends correspond to the respective labour market areas.



**Figure 11: New commercial dynamics in the NSPA**

*The Haparanda-Tornio IKEA targets a wide transnational market, extending from Norway to Russia (top picture). The commercial success of this initiative demonstrates that travel times of up to 7 to 8 hours can be relevant when delimiting consumer catchment areas in the NSPA. This makes the NSPA quite unique in a European context.*

*Around the IKEA, a wide range of shops and other commercial venues have been established (bottom picture). Haparanda-Tornio has therefore become a commercial centre for the Northern part of the NSPA in spite of its limited population.*

This also reflects a different perspective on the role of towns and cities in regional development in the NSPA compared to other parts of Europe. In central parts of Europe, urban-rural interaction is a core element in regional development dynamics. This leads to the description of urban agglomerations as “growth motors”, which generate growth “spillover effects” to neighbouring regions both because companies seek to locate outside the most expensive urban core areas and as an effect of increased consumption of goods and services by city dwellers. In the NSPA, the long distances and the extent of available space imply that few such “spillover” or “diffusion” effects can be observed. The only exceptions concern the towns situated within commuting distance from some of the largest cities, such as for example around Luleå, Umeå, Bodø and Oulu.

Along the Norwegian coast, high speed ships have played an important role integrating towns and communities since they were first introduced in the 1960. While technological improvements have allowed significant improvements of their energy efficiency, these maritime connections are still pointed out as a major source of greenhouse gas and nitrogen oxide (NO<sub>x</sub>) emissions, especially when operated at high speed. Continued efforts to develop technological solutions for more energy efficient high speed maritime connections are needed to ensure the economic and environmental sustainability of the high speed ship sector, thereby ensuring a continued livelihood in a range of coastal communities.

In the Swedish context, rail connections have an increasing importance. The construction of the Bothnia railway aims at changing the interaction of neighbouring cities between Umeå and Sundsvall, precisely by making commuting possible over a wider distance. There are also advanced plans of prolonging this. This type of polycentric integration can however only be envisaged in a restricted number of NSPA areas. The development visions are by way of consequence relatively more individual for each NSPA town or city than they would be in other parts of Europe.

By contrast, there are strong aspirations to develop long distance network dynamics and connectivity. Workshop participants see their cities as nodes in international knowledge production, as suppliers to European and global industrial systems and as maritime hubs in international transportation systems.

## **VISION 2020**

**NSPA towns and cities offer attractive living conditions, with a well functioning public space, a dynamic cultural scene and a socially and ecologically coherent land-use.**

**The private and public services they offer are an essential component of the attractiveness of NSPA regions as a whole.**

**The towns and cities are well connected to international networks, especially in the fields of research and development, industrial production and transportation.**

## **Policy measures**

- Focus on the improvement of urban qualities in NSPA towns and cities as a tool for increasing the attractiveness of the NSPA as a whole.**
- Polycentric and monocentric enlargement of functional region, especially through infrastructure improvements.**

With regards to the above mentioned increases in mobility, a main concern is the extent to which they accentuate the dependence on individual car transportation, and thereby increase both carbon emissions and the vulnerability of NSPA regions to the long term increase in the price of fossil fuel.

Some examples of efficient counter-strategies exist. Typically, the Bothnia railway is part of a regional enlargement strategy based on collective modes of transportation. This type of rail-based functional integration between neighbouring cities is however not generally applicable in the NSPA. The strategic focus needs to be on win-win solutions whereby infrastructure developments facilitate exports for NSPA industries, while at the same time promoting new types of sustainable commuting.

While there are numerous sources of energy in the NSPA, in terms of hydroelectricity, bio-energy, wind energy, wave energy, waste energy from industrial plants and fossil fuels from the Barents Sea, the price and access to these energies will be regulated within wider markets. The large energy potential of the NSPA therefore does not make any difference as far as the need for regional energy efficiency strategies is concerned. Efficient and robust mobility systems play a key role in this respect. It is also vital to construct good capacity broadband networks (fibre network) for the whole NSPA region due to the increasing need to develop contents and service applications. Such infrastructures are an all the more important component in the long

term economic development strategy of the NSPA area as the dispersed settlement patterns and long distance lead to a high degree of vulnerability.

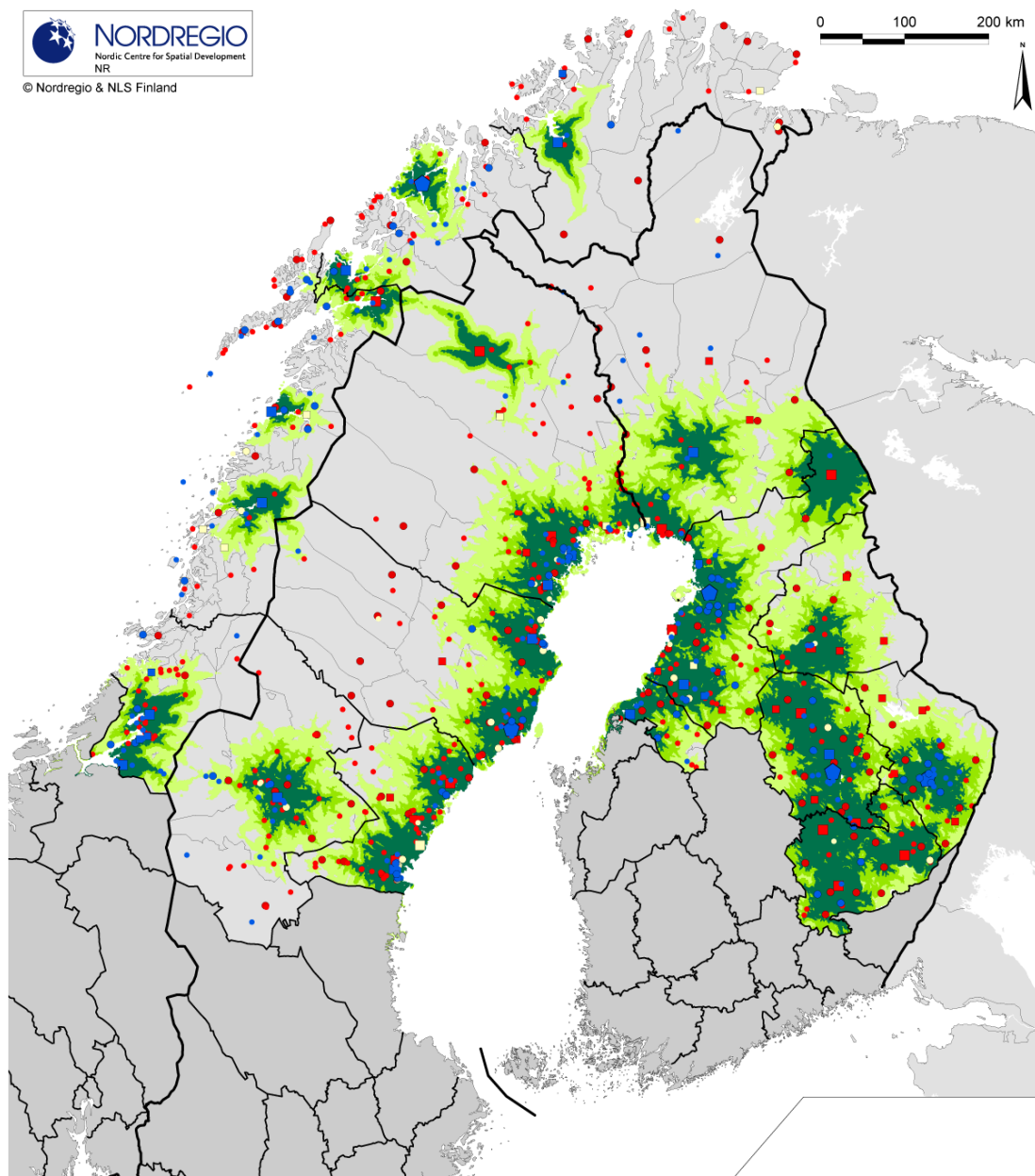
### **VISION 2020**

The NSPA regions are systematically implementing strategies to increase the robustness of their settlement and transportation systems facing potential changes in energy prices and in energy supply.

Through a focus on new technologies, NSPA cities and settlement are actively increasing their energy efficiency and reducing their CO<sub>2</sub> emissions. Climate policies are being implemented without creating an unnecessary concentration of population and activities.

### **Policy measures**

- Focus on win-win situations with infrastructure facilitating exports for NSPA industries, while at the same time promoting new types of sustainable commuting.
- Assessing the degree to which new retail and housing projects increase or reduce the overall dependence on fossil energy
- Promoting innovative solutions for collective modes of transportation in sparsely populated areas
- Actively challenging policy options that contribute to the concentration of population under the pretext of increasing energy efficiency and reducing CO<sub>2</sub> emissions, by proposing alternative models of production, consumption and mobility for sparsely populated regions.



**NSPA area and settlements within 45, 60 and 90 minutes of a town or city of more than 10 000 inhabitants**

Distance to town or city of more than 10,000 inhabitants

- Area within 45 minutes
- Area within 60 minutes
- Area within 90 minutes

Settlement population 2005 and demographic change 2002-2005

	Declining	Stable	Growing
Population size 2005			
less than 1,000	<span style="color: red;">●</span>	<span style="color: yellow;">●</span>	<span style="color: blue;">●</span>
1 to 5,000	<span style="color: red;">■</span>	<span style="color: yellow;">■</span>	<span style="color: blue;">■</span>
5 to 10,000	<span style="color: red;">■</span>	<span style="color: yellow;">■</span>	<span style="color: blue;">■</span>
10 to 50,000	<span style="color: red;">■</span>	<span style="color: yellow;">■</span>	<span style="color: blue;">■</span>
more than 50,000			<span style="color: blue;">■</span>

**Figure 12: Urban and rural dynamics of the NSPA**

*The delimitation of areas within commuting distance (45 minutes travel time) or within an acceptable distance for access to certain basic services (90 minutes travel time) from a town or city of more than 10,000 inhabitants provides a form of typology of the NSPA. Inside these areas, development may be based on the employment opportunities or supply of services of the nearest town or city. Outside, the need to create an economic sustainability in each community is greater.*

# Robust and productive local economies

The NSPA have experienced intense economic growth in the last decade. Many economic actors argue that the main limiting factor in this period has been the lack of available labour force with appropriate competencies. The extent of natural resources and the high level of international demand for these products have otherwise allowed the staple industries of the NSPA to function at full capacity. This has changed in the last year, as the steel, forestry and fisheries industries announce a range of measures to adapt to falling demand, including layoffs.

The main objective of NSPA economic development strategies is to reduce the exposure to external shocks of this type, and to ensure that local communities draw the maximum long term benefits from raw material extraction and processing activities in the regions. The debate has traditionally circled around the need to further develop processing activities in the NSPA, so as to export refined products with a higher added value. Major obstacles to such a strategy were however identified during workshop discussions. First, there is not a sufficient stock of available workers with adequate competencies in the NSPA to provide the labour such an extended processing industry would need. Second, the risk capital prepared to finance this type of investments is lacking; NSPA entrepreneurs have more difficulties accessing risk capital than their counterparts in more central regions. Third, major multinational companies involved in the extraction of raw materials in the NSPA cannot generally be expected to support the development of further processing in these regions. It is often on the contrary in the interest of these companies to concentrate processing activities in more central locations, closer to main markets and with the possibility of combining different sources of raw material supply. Constant policy efforts are required to overcome these three types of challenges, so as to maintain the international competitiveness of NSPA processing industries.

However, it does not in the current situation appear feasible to design a credible strategy relying on a massive development of industrial processing activities in the NSPA as the main source of economic and demographic growth in the region. Instead, NSPA economic development strategies need to follow three parallel axes. First, the competitive position of existing extraction and processing industries must be maintained, through continued efforts to improve their technical, organisational and commercial efficiency and when possible by targeting market segments with a high and stable demand. Far from reducing the focus on traditional staple industries, the NSPA must target a full sustainable exploitation of its natural resources. Realising this objective in some cases implies rethinking the nature and role of

NSPA staple industries. Considering the combined effects of foreseen changes in climatic conditions and of the progressive depletion of some fossil and mineral resources, the role of the NSPA in global production systems will change. In addition, an increasing awareness of the negative environmental effects of the intensive exploitation of resources within agriculture, forestry and fishery may lead to reduced output in some current core production areas. By way of consequence, parts of the NSPA where the exploitation of natural resources has been abandoned because it was not economically viable under the so-called “productivist paradigm” and in a context of abundant access to fossil energy and mineral resources may appear more attractive. Therefore, the production perspectives within the forestry, fisheries, agricultural, energy and mining sectors must be constantly updated, in view of adapting to evolutions in global production and demand patterns.

Secondly, the focus of NSPA economic development strategies is on extending the range of small- to medium-scale knowledge intensive activities, typically within research and development, high technology production or media. Such a policy must build on sectors of activity in which the NSPA have developed a competitive advantage, but also seek to establish strong positions within new industrial niches. Far from being a pipedream, this ambition for the NSPA has in many respects already been realised. Recent achievements in fields such as marine bioprospecting, environmental technology (cleantech), telemedicine, forestry, car testing, fisheries and fish farming illustrate the scope and quality of NSPA R&D environments. The objective is therefore to ensure that the NSPA regions shall continue to be drivers in an international knowledge production, and that this type of activities shall provide an additional economic basis for NSPA regions.

The NSPA in other words reject the idea that R&D efforts are most efficiently promoted in metropolitan regions. This type of discourse often prevails both at the national and European scales, and has a concrete impact on the design of funding schemes and more generally, on research policies. This implies that the NSPA need to promote dedicated R&D policies focusing on the potential for world leading research in small academic and industrial environments (see below).

Third, one needs to improve the circularity of NSPA economies, i.e. the degree to which financial inflows lead to economic exchanges between actors of the NSPA. This especially implies developing the extent and variety of the local service supply. The objective is to increase the benefits drawn from export-oriented activities and from external investments by NSPA local communities. The central argument in this respect is that the expansion of service activities is as important for the long term economic development of the NSPA as the further development of export-oriented production. This once again implies that one needs to

challenge traditional regional growth thinking inspired by “economic base” theories, and its excessive focus on export-oriented staple industries.

These “economic base”-inspired approaches, associated with a relative disregard for service sector, has encouraged the emergence of an economy where a large proportion of the benefits are appropriated by owners and investors outside the NSPA. A reinforced growth in the service sectors would compensate for this situation by creating a system of production and exchange that is more locally and regionally embedded. A continued growth in the NSPA service sector would contribute to reduce the economic “peripherality” of the NSPA, establishing a more balanced relationship with external markets.

This does not only concern business services, as locally operated services to the population also allow income from export activities to be recycled within the NSPA. This includes municipal and regional public service provision, which contributes to the circularity of local communities, by creating a locally embedded consumption of services that generates increased household income and purchasing power.

The main element of the vision for the NSPA in 2020 is therefore to have a more diversified economy, both to increase its resilience facing external shocks and changing framework conditions (e.g. due to climate change) and to promote a higher degree of circularity in the economy. Among the main strengths on which this strategy can be based, one can in particular mention the extensive natural resources, a highly educated population, a high degree of institutional and social stability and a well-embedded tradition of flexibility and adaptation.

#### **VISION 2020**

**While export oriented raw material extraction and processing industries have strengthened their competitive position, NSPA economies have diversified.**

**NSPA economies have become more circular, as the wider range of local service providers allows the income generated by extraction and processing industries to circulate more in local economies.**

**Parts of the NSPA service sector that initially targeted local export industries has developed a high level of expertise, which allows it to recruit clients world wide.**

#### **Policy measures**

- Reinforcing the integration of markets for business services within the NSPA.**
- Focusing public policies on small and medium sized companies that may be encouraged to develop around major industrial projects**

#### **Text Box 4: Development and production of oil containment booms**

Fiskebøl in the Lofoten islands is home to Norlense, one of the world's leading producers of oil containment booms and a wide range of specialised equipment to handle environmental disasters resulting from hazardous liquid spills. In the same locality, *NordNorsk Beredskapssenter* (North Norwegian Centre for Emergency Preparedness) proposes courses, seminar and consulting services on risk and disaster management related to the extraction and transportation of oil. Together, they have formed the *Arktisk Oljevernssenter* (Arctic Centre for Protection against Oil Spills) in an effort to mutualise the expertise of the local cluster.

The presence of such know-how in the region is particularly important considering the risks inherent to the development of oil transportation outside the coast of Northern Norway.



© Norlense

<http://www.norlense.no>

<http://www.nnb.no>

<http://www.arktiskoljevernssenter.no>

### **Text Box 5: Creative activities in the NSPA**

Across the NSPA, dynamic and inventive creative activities are increasingly asserting themselves as an alternative basis for economic development.

In Piteå (Norrbotten) , the Acusticum centre built around the concert hall and the Department of Music and Media of Luleå Technical University is home to about 30 companies working with music, media and sound. North Sweden also has a dynamic film industry. Around Filmpool Nord, a company owned by local and regional authorities in Norrbotten, the second largest film production cluster has developed. Since the start in 1992, more than 200 films have been produced. The ongoing Filmpool Nord Development project, co-funded by the European Union, purports to strengthen the capacity to produce competitive audiovisual products in the region. In Mid-Sweden, Filmpool Jämtland supports all types of cultural initiatives related to film production and dissemination.

North Kingdom, a creative digital agency with its head office in Skellefteå (Västerbotten) has received numerous prizes for the websites, designs, campaigns and other creative products. Global companies such as Toyota, Coca-Cola, Phillips, Vodafone and Disney are among their clients.

In North Norway, the company “News On Request” was founded in 2002 by a group of professionals with a background from journalism and film-production. With offices in Bodø, Trondheim, Brønnøysund and Alta, this multimedia company produces a wide range of fiction- and documentary films, as well as television entertainment programmes. It has received an international award for its documentary on oil spills.

Film activities have also been developing in East Finland, for example around the Kontioranta film village. In North Finland, Oulu is asserting itself as a centre for cinematographic culture, with the Children’s film festival and the Music Video Festival both attracting about 15 000 visitors every year.

<http://www.acusticum.com>

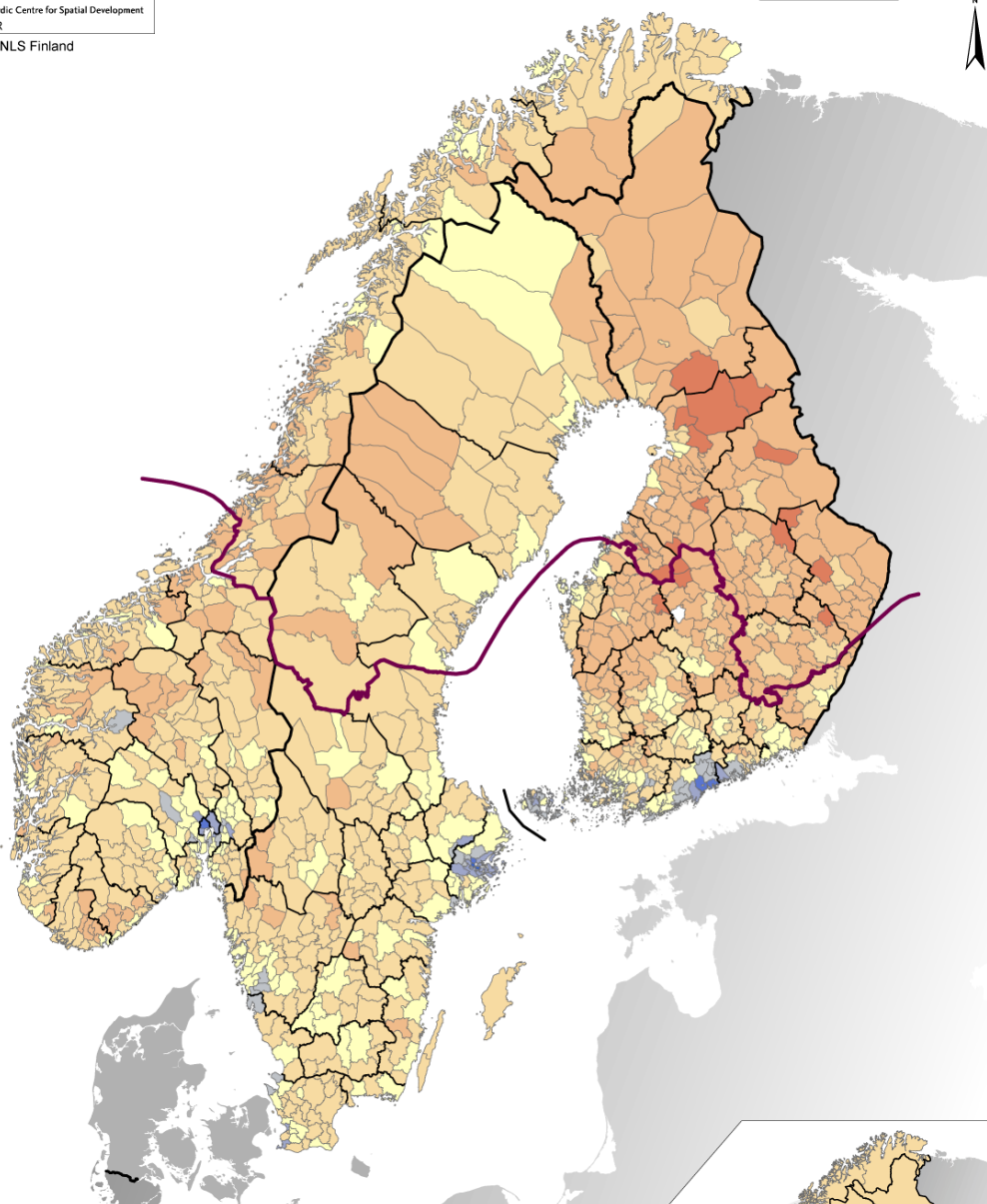
<http://www.fpn.se>

<http://www.newson.no>

<http://www.suomenfilmikyla.fi/filmikyla/taustaa.html>

<http://www.ouka.fi/lef/en/index.html>

<http://www.omvf.net>



### Household income by inhabitant compared to national average

Total household income in 2003 (Norway and Sweden) and 2002 (Finland) before taxation, compared to the national average.



Sources: National statistical institutes, Eurostat

Erik Glæresen (2008)

### Figure 13: The NSPA is not a poor region

Main gradients in terms of income are not between the NSPA and the rest of the country, but between main metropolitan areas and other regions. The main exception in this regard concerns East Finland, where a significantly lower income level can be observed both at the municipal and regional scales. There are also some significant contrasts between coastal and inland parts of North Ostrobothnia and Västerbotten. It is therefore not economic backwardness or lower standards of living that create a need for dedicated policies promoting economic development in the NSPA. The justification of such policies lies in the specific functioning of economic processes in these areas.

#### **Text Box 6: Space related activities in the NSPA**

The northernmost parts of the NSPA have a specific potential for space related activities, as high latitudes facilitate certain types of rocket launches, operations requiring constant daylight or darkness and communication with polar orbit satellites (typically used for remote sensing and meteorology). The Andøya rocket range, located on the northernmost island in the archipelago of Vesterålen in Nordland county, started operations in the early 1960s and has focused particularly on atmosphere research since the mid 1990s. The Esrange Space Center north-east of Kiruna (Sweden) was inaugurated in 1966. It has extensive ground based scientific instrumentation, balloon operations and satellite operations for remote sensing, research and telecommunications. The wide open spaces also create a favourable environment for testing civil and military space and flight systems, as one can temporarily reserve an air corridor making it possible to make 350 km flights in each direction. The fastest growing activity is however the control and operation of remote sensing satellites, as the market for these types of data is expanding rapidly.

Finally, the Swedish Space Corporation, the Ice hotel, the LFV group operating most Swedish airports and the Kiruna business development company Progressum have joined forces to create the Swedish spaceport. The objective is to create Europe's first and most obvious place for personal suborbital spaceflights. According to the Swedish spaceport website, the first commercial flights are foreseen in 2012.

<http://www.rocketrange.no>

<http://www.ssc.se>

<http://www.ssc.se/?id=9500>

<http://www.virgingalactic.com>

# Coordinated actions to promote sustainable tourism

One of the main export-oriented service activities of the NSPA is tourism. This sector is particularly important from a territorial cohesion point of view as the main factor of economic viability in a range of small settlements beyond commuting distance from main towns and cities, and as a good source of employment for women. The main challenge however lies in the seasonality of activities, which implies that tourism often needs to be regarded as a complement to other types of activities.

Workshop discussions emphasized that the possible effects of climate change on tourism development are multiple and difficult to foresee. On the one hand, a general warming can prolong the summer season and reduce the number of skiing resorts in central Europe with a stable snow cover in winter. This could benefit the NSPA. On the other hand, increased precipitations in summer or a reduction of the intensity of the Gulf Stream may have adverse effects on the attractiveness of the NSPA.

Further developing the focus on experience and events is a way of increasing the economic returns from tourism activities. From an experience industry point of view, the perspectives for development of winter tourism appear promising, given the length of the season and the exceptional natural preconditions. But more general efforts to create commercial offers based on the concept of “wilderness tourism” can also be developed; a number of examples of good practice can be used wider sources of inspiration in this respect.

Increasing the cultural attractiveness of the NSPA is intimately linked with efforts to improve the self-perception of NSPA regions, developing activities with links to local traditions, but with innovative approaches and perspectives. The Sámi population provides an example of this through the success of the Riddu festival in Kåfjord in the Norwegian county of Troms, which has been organised yearly since 1991 and attracting both local and foreign visitors. Other events, such as the Air Guitar festival of Oulu, the Ilosaarirock festival in Joensuu, the Bukta rock festival in Tromsø or the major yearly Umeå football tournament for youth, are not based on local traditions but contribute both to stimulate local cultural and social dynamics and to increase the external attractiveness of the concerned areas. Tourism strategies are consequently intimately linked to regional branding efforts.

The degree to which efforts to develop new types of tourism and cultural initiatives can lead to increased numbers of visitor is however dependent on national and international connectivity, on a good coordination between regional actors to develop coherent offers. The role of the regions in coordinating these diverse efforts is therefore primordial.

### **VISION 2020**

The NSPA has a thriving tourism industry, both as a wilderness and outdoors experience destination for foreign visitors and as an area considered attractive by nationals.

Tourism is used a complement to other types of activities, ensuring a maintained viability in a number of small and remote locations. Regulatory and fiscal arrangements to promote these types of multi-activity have been adopted.

The improved coordination between actors from various sectors, including transport, hospitality, culture and the experience industry, have transformed the tourist's experience of the regions and improved their attractiveness.

### **Policy measures**

- Sharing good practices within the NSPA in terms of place marketing, event and experience based tourism
  
- Further developing joint tourism routes and products across national boundaries in the NSPA

### **Text Box 7: Examples of tourism development in the NSPA**

The success of Christmas tourism in Finnish Lapland, organised around the Santa Claus Village in the city of Rovaniemi, is the result a proactive tourism development policy initiated in the 1980s combined with remarkable cooperative efforts among private commercial interests. It is referred to as a prime example of commodification of an intangible resource (Christmas and Santa Claus), but at the same time exploiting unique geographic and cultural assets of the region such as Arctic Circle, climate and Sami traditions. The Ice Hotel in Jukkasjärvi is another example of successful branding strategies, as it has attracted massive international media attention and become a landmark destination in Sweden.

In East-Finland, regional authorities have been working actively to promote the Saimaa-Pielinen lake system as a World Heritage site, as an area of great natural beauty of particular geological and historical interest. This is part of a general strategy to promote this area as a tourist destination, and has been the result of a process involving local, regional and national authorities.

The so-called High Coast in the Swedish county of Västernorrland obtained World Heritage status in 2000. Its unique landscape features have been shaped by an uplift of about 285 m since icecap covering the retreat of the icecap that covered the area some 9,600 years ago. While the organisation “Höga Kusten Entré” organises many of the generally small private companies involved in tourism, the coordination between the actors needs to be further developed. Improving the accessibility of the area and creating a clearer international profile is among the priorities for the future tourism development.

In the northern parts of the county of Nordland, Arena Innovative Experiences is a joint venture between the cluster businesses, the public support and development system and research and educational institutions. The companies taking part in the business cluster are located in the regions of Lofoten, Vesterålen, Ofoten and Salten. They have been part of a process to renew and further develop experience production, enhance market development through increased internationalisation, increase competency levels among regional actors and develop network connections between them and more generally improve framework conditions for the experience industry.

<http://www.rovaniemenkehitys.fi>

<http://www.icehotel.se>

<http://www.hogakusten.com>

<http://www.spatialnorth.org/case-studies/finland/Saimaa-Pielinen%20World%20Heritage%20-%20jm.pdf>

<http://www.innovativeopplevelser.no>

### **Text Box 8: Transforming the industrial heritage of Västernorrland into a resource**

The ISKA project in the Swedish county of Västernorrland sought to actively use the heritage from two centuries of development in the manufacturing industries as a basis for new initiatives in fields such as research, experience industry, cultural tourism and technical development. The project ran from 2000 and 2005.

Västernorrland is a county dominated by big export companies with a steadily diminishing workforce. The population identifies with these types of activities, creating situations where it is sometimes difficult to propose alternative development paths. In the ISKA project, the industrial heritage is being actively used as an instrument to federate a local associations, businesses, interest groups, politicians and civil servants. The project has had significant direct effects, creating some 30 new companies and 80 new jobs; more importantly, it has contributed to challenge traditional thinking considering growth as synonymous with large-scale operations and manufacturing industries. It has helped demonstrate that the cultural heritage can provide a basis for an improved economic viability of local communities.

<http://www.iska.nu>

### **Text Box 9: Branding efforts to promote high quality food from Jämtland**

In 2005, the food wholesale company Servicegruppen situated in Östersund (Mid Sweden) launched the registered trademark “Smakriket Jämtland”. The product range includes char, reindeer meat, elk meat, bread, cheese, vegetables, ice cream, berries, mushrooms, jams, juices, drinks etc. The company also awards selected restaurants with the title of “Smakriket restaurant”.



© Servicegruppen AB

Independently of this, Jämtland is also home to the national Swedish resource centre for small-scale production of high quality foodstuffs, Eldrimner. The centre provides counselling and support for small scale producers and actively promotes regional culinary traditions.

The county council also has an ongoing dialogue with the Slow Food movement, in view of hosting its international fair in 2011 and possibly also the permanent office for the organisation for the Nordic countries.

<http://www.smakriket.se>

<http://www.eldrimner.com>

# World level R&D activities within specific industrial niches

European policy documents sometimes assimilate NSPA development challenges to those of rural areas in continental Europe, considered comparable in terms of population densities and activity profiles. Fundamental differences however exist, in particular when one considers research and development and innovation capacity. Contrary to rural areas in continental Europe, the NSPA indeed hosts numerous research environments in many locations, including a number of small towns. These activities play a major role when it comes to changing the perception of the settlements hosting them and raises their level of ambition when it comes the social and economic development.

Prevailing European research and development policies tend to focus on so-called centres of excellence, often measured in terms of the numbers of scientific publications or patents. This leads to an approach of R&D focusing on the largest units, which are mostly concentrated in or around metropolitan regions. While R&D activities in small and remote settlements obviously does not compete with major academic or industrial research organizations in terms of mass, and may be excluded from some types of research requiring extensive infrastructure investments, previous scientific and innovative achievements in the NSPA provides ample evidence on their capacity to host knowledge-based processes. The main constraining factor is not the size of settlements or the distance to core regions, but the linguistic, cultural and institutional capacity to participate in international networks.

NSPA regions envision to build on existing success stories and to participate fully in the further development of an international knowledge economy. This implies fighting against the perception of R&D identifying knowledge-based processes in regional development as an alternative primarily for core regions. NSPA regions need to emphasize the importance of small, dispersed R&D teams that can focus on the needs of local industries with which they have a permanent dialogue and can establish the relationship of trust and cooperation needed to carry out cooperative innovation processes. Such activities are a complement to the more fundamental and interdisciplinary research possible in core regions.

The challenge in these types of strategies is to ensure that the insufficient mass of these dispersed R&D communities does not make it impossible for them to attract highly skilled expertise and keep updated on international advances within their respective fields. The processes of attracting highly skilled researchers are self-reinforcing, as leading teams within

specific fields attract the most prominent researchers. Constant efforts are however required in the NSPA regions to establish leading edge research communities within niche areas.

A number of existing success stories in the NSPA demonstrate the feasibility of such strategies. Further amplifying the development of a knowledge economy in the NSPA however requires a more distinct identification of the competitive advantages in the region. Higher degrees of flexibility and reactivity in small universities and research organisations constitute one such advantage. The critical issue is the availability of funds for R&D activities and the quality of the strategic leadership deciding on the usage to be made of these funds. A recurrent idea in the workshops has been to allocate a proportion of the income from raw material extraction in the NSPA to a specific fund, financing R&D and innovation activities in the regions. This would be a way of ensuring that the income from these activities benefits the concerned communities and regions to a larger extent. One still needs to define the most suited governance model to maximise the leverage effect of such funding for the development of an NSPA knowledge economy. Workshops participants argued in favour of a “quadruple helix” model, including not only universities, industries and regional authorities, but also the third sector. The NSPA regions in other words imagine themselves as test beds for more integrative approaches of R&D, epitomised by projects of using specific settlement as “living labs” for real life tests of new technologies or other innovative solutions. The notion of “dispersed open innovation systems” also reflects this idea of R&D processes that are less limited by geographic and sectoral boundaries. Such a strategy may also help improving the availability of funds for high risk commercialisation based on new ideas.

## **VISION 2020**

**The NSPA has strengthened its position as region with intense R&D activities, through targeted efforts within carefully selected niches.**

## **Policy measures**

- Establishing funds dedicated to the development of R&D and innovation activities in the NSPA, financed on the basis of income from raw material extraction activities;
- Improving connections with research environments in North West Russia, in order to draw benefits from their expertise;
- Systematising the thinking on regional governance of R&D and innovation processes, branding the NSPA as a region on the forefront of integrative approaches of R&D in which industrial, political and civil society representatives play an active role.

Higher Education Institutions (HEI) are pivotal in R&D dynamics, as research environments may cluster around them and innovative industrial initiatives may emerge from them. There was a general consensus among workshop participants that the geographical spread of HEIs in the NSPA was either adequate or excessive; a further dispersion in smaller towns was not considered desirable.

On the other hand, measures to compensate for the limited size of individual HEIs were described in some detail. Exchanges and networking of HEIs in the NSPA and Barents region, joint academic degrees, increasing the social attractiveness of campuses and developing specific programmes to attract foreign students were proposed as possible measures. Efforts targeted at national funding systems, to ensure that smaller HEIs would not be penalised, were also mentioned.

### **VISION 2020**

**The NSPA offers attractive higher education opportunities, and recruit students from all over the world.**

**This has been made possible through targeted investments in a restricted range of fields of excellence, within technology and life sciences but also organisational and commercial research.**

**In addition, Higher Education Institutions offer a sufficiently wide range of courses to allow most students to obtain a degree without leaving the NSPA if they wish to. Likewise, efforts to promote lifelong learning have been intensified.**

### **Policy measures**

- Ensuring that funding opportunities do not favour larger Higher Education Institutions excessively**
- Developing networks of cooperation between HEIs within and beyond NSPA, especially at the cross-border level and in the Arctic region**
- Finding an appropriate balance between targeted fields of excellence, and the need to cover the general higher education needs in the NSPA region, both in terms of basic education and lifelong learning.**

**Text Box 10: Energy research and development in the NSPA**

Piteå, a city with energy intensive paper mill industries and a long tradition for waste energy recuperation, has had a research and development centre for renewable fuels with focus on combustion, gasification and biorefining processes since the late 1980s. This centre, ETC, works in collaboration with private companies and public and academic institutions, and focuses on ash related issues, industrial combustion, small-scale biomass combustion and gasification of biomass.

In Joensuu, the Wood Energy Net WENET functions as a competence centre within the field of efficient and sustainable use of local wood energy resources. It assists companies with initial evaluation of potential, concrete investments for building up energy plants and their fuel supply chains, as well as education and transfer of knowledge.

A large solar energy industry processing silica and quartz has been established in Norway since the 1990s. There are research facilities and production plants all over Norway, but Nordland is nonetheless emerging as the most important county with extraction in Tysfjord, and processing activities in Drag, Glomfjord and Narvik. Many of the companies established in these locations are world leading within their niche.

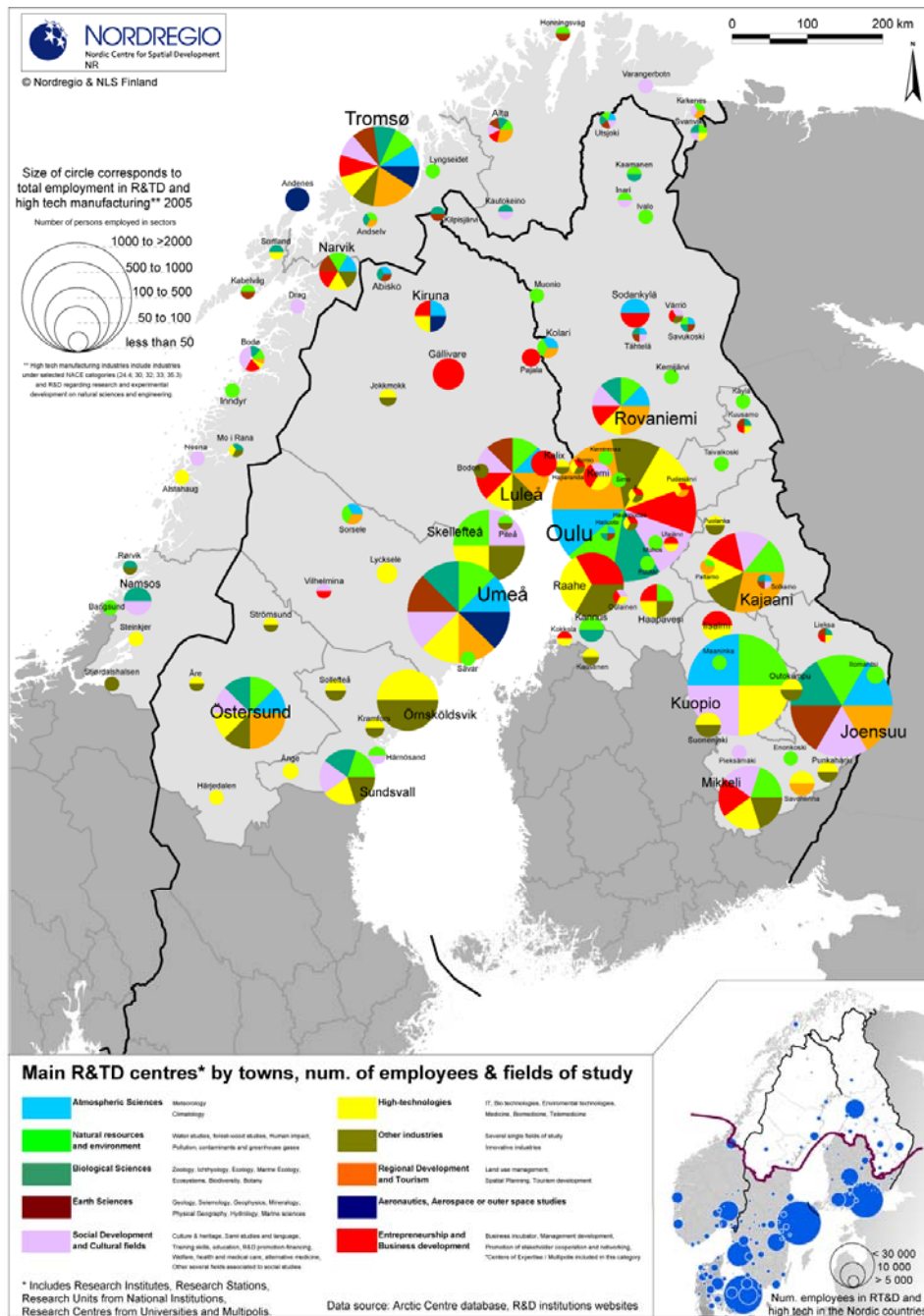
<http://www.etcpitea.se>

<http://www.wenet.fi>

<http://www.recgroup.com>

<http://www.solarcellrepower.com>

<http://www.norcryst.no>



**Figure 14: Research and Technology Development centres in the NSPA**

*There are numerous Research and Technology Development (R&TD) centres in the NSPA, not only in the main urban areas but also in the smaller towns. In spite of the small size of the research environments, many have managed to position themselves as world leading within specific niches. As such, they are highly relevant for the development of their local environment. There is a need to emphasize the importance of these small research environments at the Nordic and European levels, where they tend to be ignored because of their size (bottom right map).*

### Text Box 11: Telecom and ICT development in Kokkola – Central Ostrobothnia

In the economic area of Kokkola in Central Ostrobothnia (North Finland) the ICT industries have grown rapidly since 1999. Over 500 jobs have been created in this sector and a large number of companies have been created, some of which have either been integrated in international groups or developed activities abroad. Three telecommunications companies working with mobile phone or network technology stand for about one third of the new recruitments. These have primarily been recruiting engineers. Another third of the new jobs concern technical support centres.

Two important factors made it possible to recruit persons with adequate competencies in Kokkola. First, the Central Ostrobothnia University of Applied Sciences has been running courses targeting the needs of local emerging industries. This has made it possible for 85% of its students to stay in the region after graduation. Continuing education courses also allowed employees to further develop their competence levels. Furthermore, the Netpolis initiated by the municipalities of Kokkola and Kaustinen successfully managed to market the local Telecommunication and ICT cluster and to encourage return migration to the region.

Most of these projects are partly financed by the European Regional Development Fund. In the future this development work will continue to increase the co-operation between different industries.

Netpolis is a part of the Multipolis network, which includes Northern centres of expertise focusing on different sectors of high technology. Multipolis initially concerned North Finland, but is now extending to north Sweden and North Norway. Close co-operation combines the fruits of the know-how of locally operating centres of expertise, called poleis, thus creating increasingly competitive hi-tech solutions. Due to its magnitude and diversity, this concentration of expertise is very competitive also at the international level.



© Multipolis

<http://www.netpolis.fi>  
<http://www.multipolis.com>

### **Text Box 12: Promotion of innovation in the NSPA**

Regional authorities in the NSPA promote innovation on the basis of alliances between research environments and knowledge intensive industries. The few examples presented here are only illustrations of the types of initiatives taken throughout the NSPA.

In Northern Norway, the Norinnova company has been created to commercialise new technologies and research based business ideas. The connection with research environments is strong, especially as the University of Tromsø is the main shareholder. The ambition is both to create new sectors of activity in Northern Norway and to reinforce existing ones. Since 1993, over 30 companies have been established, with 350 to 400 new jobs in high technology related sectors.

In the Oulu region, a new Alliance Agreement between the pivotal actors of the innovation system was reached in February 2009. This implies that the Centre for Internet Excellence (CIE), the Printed Electronics and Optical Measurements Innovation Centre (PrintoCent), the Martti Ahtisaari Institute of Global Business and Economics (MAIGBE), the Centre of Expertise in Water Industry Cluster (CEWIC) and the coming Centre for Wellbeing Technology will invest in shared resources and infrastructures and create the mechanisms for joint procurement. Within carefully specified areas, the parties will also profile themselves as a group. The agreement also involves the City of Oulu, the University of Oulu, the Oulu University of Applied Sciences, Technical Research Centre of Finland and Technopolis Plc.

In Umeå (Västerbotten), the three Uminova innovation, Uminova science park and Uminova invest together promote innovation in the region with personal through personal support, networks, a creative environment and risk capital. The focus is on business ideas of researchers, employees and students of the Umeå university and hospital, as well as on innovative ideas developed by companies in the region. Together with the Umeå Biotech Incubator, Uminova has encouraged the development of the biotechnology cluster in Umeå, which currently comprises almost 50 companies. Most of these are organized in UmeåBio, the Umeå Biotech industry organisation.

In Joensuu, the Regional Development Company, JOSEK contributes to consolidate and diversify the economic structure, promote the competitiveness, and improve the operating conditions of local business life in an increasingly international environment. The primary means of reaching these objectives is through enhanced cooperation. The new Russian trade project it has launched in the beginning of 2008 offers an example of organisational innovation in the NSPA. Launched in cooperation with other regional development actors, the North Karelian Economic Developmental Russia Programme shall promote business ties between

Russia and Finland, provide solutions to the service needs of companies, and encourage North Karelian companies to extend their operations into the Russian market. The project also aims at creating and establishing a new provincial model for corporate services and developing the logistics position of the Niirala border-crossing point.

<http://www.norinnova.no>

<http://www oulu.fi/ajankohtaista/uutiset/2009A/innovaatiokeskittymasopimus.html>

<http://www.uminova.se>

<http://www.ubi.se>

<http://www.umeabio.org>

<http://www.josek.fi/eng/?ID=1518>

### **Text Box 13: Innovation in the fish farming and fish processing industries**

North Norwegian fish farming industries focus on high quality based on the purity of Arctic waters. The full exploitation of this naturally favourable environment however requires continuous innovation. In Nordland, the Stokkmarknes-based company Nordlaks has acquired world rights to apply patented freezing technologies avoiding the formation of ice crystals in salmon processing, thereby creating a competitive advantage on producers from other regions. In Troms and Nordland, Lofitorsk is at the forefront when it comes to developing cod farming, in close cooperation with multiple fishery research environments. They for example seek to overcome challenges regarding the rearing of juvenile cod and fluctuations in the production of natural plankton. In all these respects, either through commercial alliances with external innovative actors or through regionally initiated R&TD, North Norwegian stakeholders intervene as drivers of change in the fish farming and fish processing industries.



© Lofitorsk AS

<http://www.nordlaks.no>

<http://www.lofitorsk.no>

<http://www.akvaplan.niva.no/projects/summaries/aquaresearch/PROCOD.asp>

# Coherent regional transportation systems

The NSPA is often approached in European regional policy as a periphery, for example through its inclusion in the 'Northern Periphery' Interreg programme. Workshop participants however do not consider peripherality to be the main challenge for the NSPA. Good air connections generally ensure a high accessibility to main cities, making physical meetings with relevant institutional, economic or financial actors easier than it is in many rural areas of continental Europe. While higher transportation costs are identified for some export industries, these are only partly due to the long distances to main European markets. The more significant limiting factors are the lack of logistics centres, the small potential for economies of scale and the lower reliability of transports because of limited capacity in infrastructure.

These types of challenges are not reflected in traditional European maps of accessibility, showing extremely low values for the NSPA. Such maps therefore cannot guide the strategic thinking of the NSPA in terms of transport infrastructure. Instead, the issues the NSPA needs to deal with are identifying bottlenecks for industrial exports, encouraging interregional mobility and increasing the coherence of regional transportation systems to facilitate the emergence of logistics centres and to encourage intermodal transport. The objective is to design infrastructure solutions that would not only meet the needs of export industries, but also facilitate tourism and increase the mobility of the NSPA population when this is possible.

It is an undisputable fact that there is a mutual dependency between the NSPA and the rest of Europe what regards supply of goods and natural resources. As much as 90 % of the European need of iron ore comes from this area. Newly discovered mineral resources in northern Sweden and Finland will drastically increase the iron production, create new jobs and regional growth. A prerequisite for this to happen is that the maritime ports and railways are developed to meet the transportation needs. Sweden and Finland are also among the world leaders in exports of wood and wooden products. From these countries, 70-80 % of the production is exported within EU. Also other sectors such as tourism need improvements in the transport infrastructure to continue to grow. In recent years there has been an increase in the number of guest nights, as a result of the development of new tourism sites and services. There is a high potential for an even greater increase of winter tourism as well as summer tourism partly as a result of expected climate change.

There are therefore multiple reasons for which improving the transport infrastructure is the primary strategic concern for the NSPA. This includes north-south connections as well as east-west and transversal transportation networks. The objective is to facilitate the emergence of more and better connections between the NSPA and world markets, especially based on railway and maritime transport. The main priority is to include this area in the TEN-T priority network, with the Bothnian Corridor connecting the Northern Triangle and the northernmost branch of Northern Axis, both on the Swedish and Finnish sides of the Bothnian Gulf. This infrastructure, today suffering from lack of capacity and bottlenecks, is important for Sweden, Finland and Norway as well as for transit transports to and from the Russian and Asian markets. The Bothnian Corridor has for a long time been used for domestic transit transport of high volumes of fish between Narvik and Oslo through Sweden. With increased capacity, there is a great potential for modal shift from road to rail/sea freight transports for these flows.

The Northern Axis runs from Narvik to Saint Petersburg through Haparanda and Vartius and is part of the Northern Dimension Partnership on Transport and Logistics to become operational by January 1st, 2010. It has a global dimension described by Northern East West freight Corridor project (NEW), whose objective is to develop an intermodal transport corridor between North Western China, Russia and the North American East Coast. It is also important to integrate East-Finland and eastern parts of North Finland in this dynamic, as the natural interface between the NSPA and North-West Russia. A new railway connection between Salla and Russian Alakurtti (Salla Corridor) is under planning. It would open new possibilities for freight traffic through Northern Sweden and Northern Finland to the Murmansk region easing the transport burden on the railway between Kandalaksa and Saint Petersburg. Regional stakeholders of East-Finland Regional stakeholders of East Finland also highlight the importance of the Finnfive road axis from Helsinki to Murmansk, connecting Eastern Europe directly to the Barents Region.

The railroad connection between Tornio/Haparanda and Kolari is an important part of the infrastructure needed for the transportation of the iron ore resources in the Pajala-Kolari area at the border of Finland and Sweden. Due to the large quantities of iron ore to be transported from 2011 onwards, a crossborder railway connection is a prerequisite for the stable development of the municipalities in the Tornio river valley. The possibility of creating a railway from Pajala-Kolari to the Finnmark harbour of Skibotn (*Ishavsbanen*) is also being promoted by some regional stakeholders.

Exploration of the large unrecovered oil, gas and other natural resources in the High North is heavily dependent on well developed transport infrastructure. Well-functioning and effective logistics solutions are a key issue in this respect. Keeping the differences in the level of

bureaucracy and customs formalities between Russia and the western world in mind, it is essential to develop an infrastructure being able to deliver well functioning and streamlined solutions to the transport users. The Kirkenes – Murmansk axis is essential in this respect and has a great potential for development of a multimodal Twin Ports concept. With railroad connections both between the two ports and further on to the Finnish railway system – together with well developed road systems and the adjacent airports – the port cluster will fulfill all the requirements to serve as a multimodal transport hub for the High North and the Arctic.

One of the important transversal road axes is the ViaNordica axis (E12) from Helsinki to Mo i Rana in Norway, connecting across the Gulf of Bothnia at the level of Umeå and Vaasa (Kvarken Region). Discussions on the possibility of establishing a fixed connection between these two cities are ongoing, which would further increase the relative weight of this East-West axis in the transport system of the NSPA. North and south of this is the Finnish part of the aforementioned Bothnian Corridor railway infrastructure.

The North East Cargo Link (NECL) is the railway and maritime corridor from Trondheim to Saint Petersburg via Östersund, Sundsvall/Härnösand and Kaskö and Mikkeli. This is of great importance for freight as well as interregional commuting and tourism. With its connection to the Bothnian Corridor the NECL corridor has a potential for increased freight transports via Trondheim also from southern Sweden as well as from the northern NSPA.

Considering this configuration of multidirectional road and rail axes, the Bothnian Corridor is not primarily approached as a combination of two north-south axes along the Finnish and Swedish coastlines of the Sea of Bothnia, but as the centrepiece in a system of East-West connections. The ambition is to draw the full benefits from the complementary roles played by each of these axes, through effective multimodal coordination and to avoid bottlenecks. The convergence of flows within the NSPA space could progressively increase the interaction between regional industrial actors, increasing the relevance of the NSPA as an economic macro-region, and not the least secure the supply of goods and products to the southern part of Europe.

In parallel to this, it is vital to construct good capacity broadband networks (fiber network) for the whole NSPA region due to the increasing need to develop contents and service applications. Broadband development is a way of reducing the dependency on transport, allowing for the development of distance work and distant service provision (e-services). The NSPA could become a test-lab in this respect, as the needs are important and the infrastructure

investments that can be expected to be carried out by private companies. The limited population of many NSPA settlements indeed make them relatively unattractive to private network operators. Innovative models of public-private partnership are needed. In this regard, there are examples of good practice in the NSPA that can be further built on. It is important for the NSPA to promote regulatory frameworks for efficient public participation in the provision of broadband access.

## **VISION 2020**

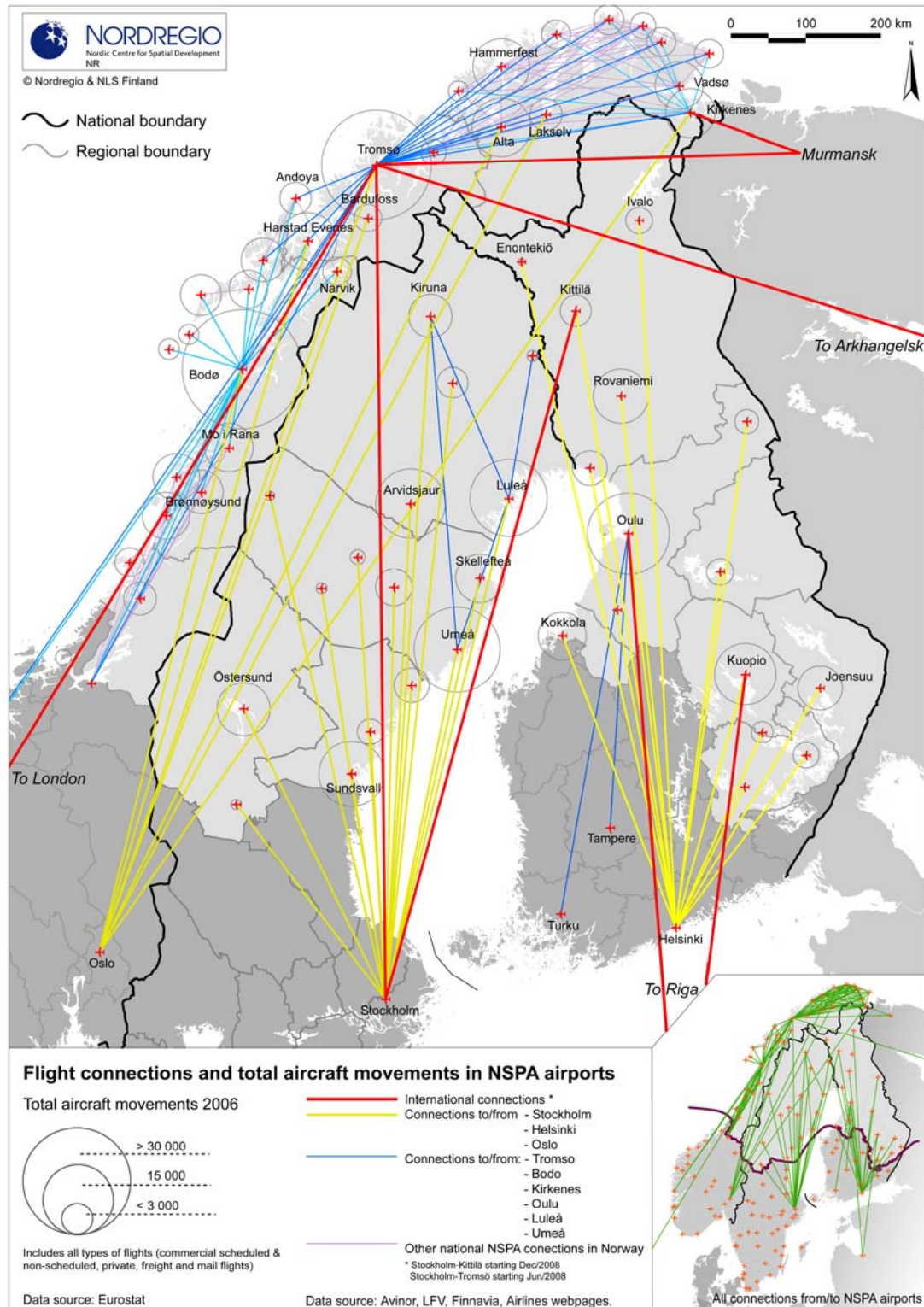
**The improvements in the transport system make it possible for the NSPA to become an integrated region, with constantly increasing East-West traffic.**

**Economic relations with Russia have intensified, as improved infrastructure has progressively allowed industrial cooperation projects to emerge**

**Efficient maritime hubs on the Baltic Sea and on the Norwegian Sea function as gateways for the NSPA as a whole, through well-established intermodal connections with the rail and road systems.**

## **Policy measures**

- Obtaining priority TEN status for the Bothnian corridor by the inclusion of this infrastructure in the TEN-T Core Network.**
- Continuous inclusion on the comprehensive TEN-T network and high priority in national infrastructure plans for certain strategic East-West corridors in the NSPA.**
- Improving the vertical coordination between European, national and regional actors when it comes to transport infrastructure investments targeting the Russian market. and for certain strategic East-West corridors in the NSPA**
- Improving the vertical coordination between European, national and regional actors when it comes to transport infrastructure investments targeting the Russian market.**



**Figure 15: Air connections from NSPA airports**

*The general high quality of air connections in the NSPA implies that the connected towns and cities have a higher accessibility to European metropolitan regions than many rural areas on the continent.*

*The extreme concentration of the Finnish and Swedish air systems around Stockholm and Helsinki stand in contrast to the system of regional hubs and local connections in Norway. The lack of connections between regional airports in the NSPA reduces the scope for interaction and increases the dependence on the capital region.*

There are a number of concrete arguments supporting the view that the NSPA is transforming from an “external periphery” of Europe to an interface, such as the development and internationalisation of Russian production systems, the opening up of new Arctic maritime transport routes and the potential for establishing multimodal transcontinental freight corridors through the NSPA exemplify this. As far as rail connections with Russia are concerned, there is still no passenger traffic between East Finland and Russian Karelia, but the opening of a regular line between Joensuu and Petrozavodsk is being negotiated.

Infrastructure improvements between Russia and the NSPA would create the basis for transnational industrial cooperation and increased commercial exchanges, as well as facilitating Russian transit traffic through NSPA ports. Current institutional settings however make it difficult to establish mutually committing, long-term partnerships between NSPA stakeholders and their Russian counterparts. These uncertainties effectively reduce the extent of infrastructure investments aiming at facilitating exchanges with Russia, thereby preventing the deepening of industrial and commercial relations. Considering the potential benefits of such enhanced relations, not only for the NSPA but also for Europe as a whole, a larger involvement of national and European authorities providing guarantees to compensate for the uncertainties and risks of these infrastructure projects appears necessary.

#### **VISION 2020**

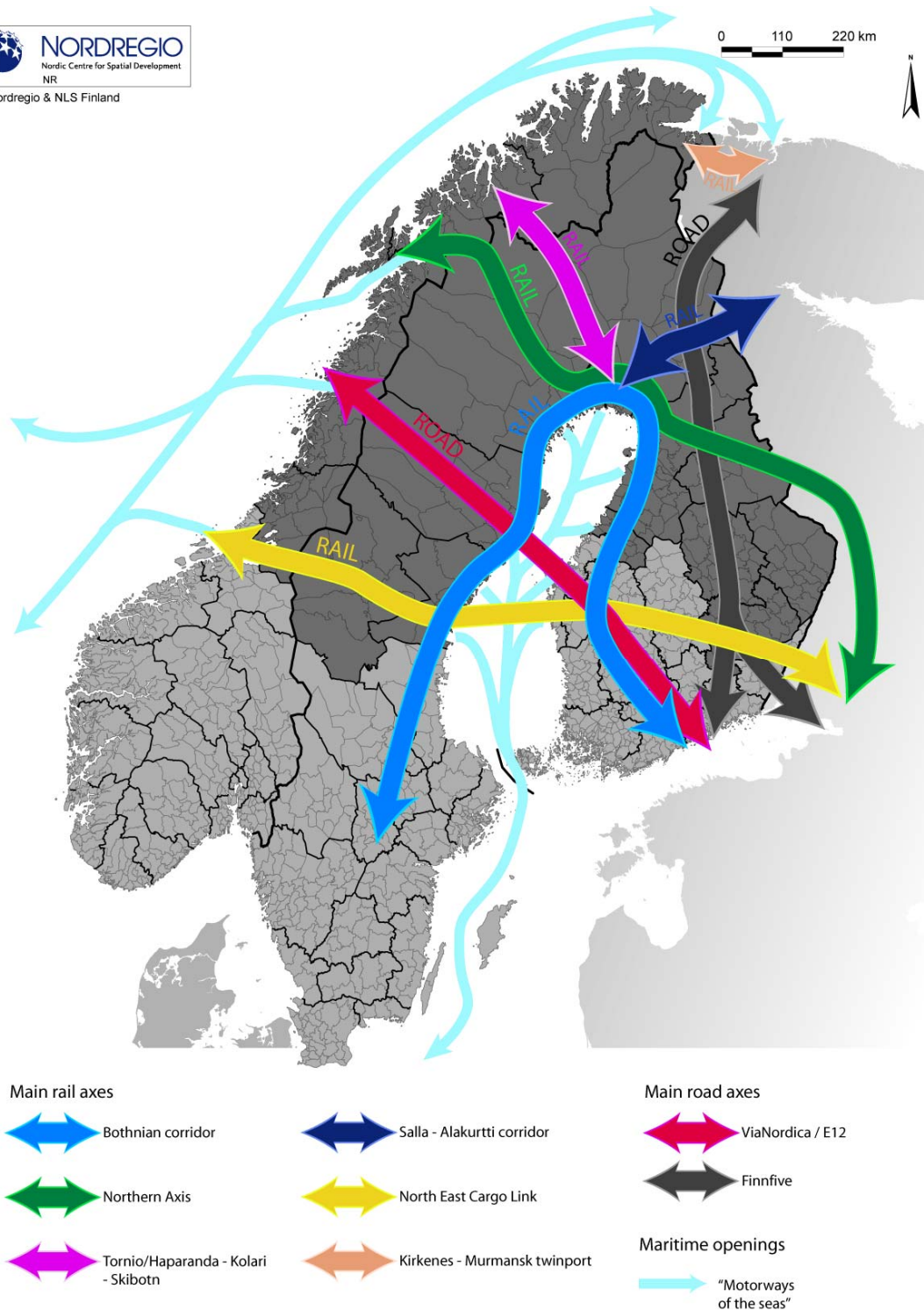
**The NSPA transportation infrastructure is developing on the basis of transnational strategies, established in the context of the Barents and Baltic Sea Regions and of enhanced cooperation with Russian regions.**

**Economic relations with Russia have intensified, as improved infrastructure has progressively allowed industrial cooperation projects to emerge. The dialogue with Russian counterparts is increasingly based on mutual long term commitment and shared strategic objectives. It has allowed infrastructure improvements and facilitated cross border flows. On this basis, cross-border activities between NSPA and Russia have increased significantly in all sectors.**

**The NSPA has been actively following up climatic and geopolitical changes in the Arctic, in order to draw full benefits from the emergence of new transcontinental transportation axes and raw material extraction activities.**

#### Policy measures

- Enhanced EU support promoting cross-border infrastructure and exchange with Russia;
- Facilitating smooth border crossings with Russia, both through technical improvements and simplified administrative procedures, e.g. by encouraging the abandonment of visa requirements;
- Shared strategy for the NSPA taking advantage of potential new Arctic maritime transportation axes.



**Figure 16: Main transport axes to be developed in the NSPA**

*The development of the Bothnian Corridor would improve the overall coherence of the transport infrastructure in the NSPA, as a complement and connecting link between different transversal connections. The importance of maritime transport for the industrial development of the NSPA must also be emphasized, through the motorways of the seas of the Bothnian Sea and Norwegian Sea.*

*As illustrated by the map, a number of strategic links outside the NSPA are of strategic importance for its economic, e.g. the Helsinki-Tallinn and Öresund links.*

*In a 2020 perspective, the potential new maritime transportation axes across the Arctic also need to be integrated in this model.*

### 3. Conclusion: Proactive and reactive visions for the NSPA

The present foresight and visioning exercise has brought together a wide range of regional actors, including civil servants, politicians and researchers. While it has allowed us to get a more precise picture of the diversity of social and economic situations within the wide NSPA space, the convergence of positions on the desired futures and anticipated challenges for the NSPA is quite obvious.

The NSPA share a high institutional, industrial and social capacity to face current and upcoming challenges. The strength of Research and Technology Development (R&TD) activities in these regions demonstrate that the ambition of basing economic development on knowledge intensive activities is not a pipedream. Much of the global connections of the NSPA, in terms of commerce, industrial or institutional cooperation and flows, do not depend on metropolitan regions acting as “gateways” but are handled directly by regional actors. As such, the NSPA do not fit into the general model of European peripheral and rural sparsely populated areas. Their development perspectives are not based on the need to link up to a European core area, but can be based on the combination of endogenous natural resources and the capacity to mobilise human capital.

The demographic issue is the core challenge throughout the NSPA. A main component in the vision for 2020 is to change the perception of the regions, and especially of their rural parts, making them more attractive to women, young people and foreigners. This implies efforts in terms of communication and branding, based on the existing qualities of the NSPA in terms of natural settings and social contexts. It also implies that concrete measures need to be implemented to identify the gender bias in local hierarchies and development plans, to improve the sense of belonging among young people, to encourage in-migration of young graduates and to facilitate the successful integration of foreigners. Overall, the NSPA need a strategy for its sustainable social development; this is a precondition for continued economic growth.

The reasons for which the NSPA population cannot be presumed maintain itself on the basis of economic development opportunities alone are multiple. The most important one is that the small size of many NSPA labour markets implies that they need to be specialised; they are therefore vulnerable to economic cycles and fluctuations in world market prices. The sometimes dramatic social effects of such economic downturns and the corresponding media coverage lead to an impression of recurring crisis in the NSPA, an underrating of the economic

benefits drawn from activities in these areas and an impression of regions with a lower overall economic performance. It is all the more important to improve the communication on the benefits drawn from industrial activities in the NSPA on a long term perspective, both within and outside the regions. This would help justifying the higher costs of infrastructure supply and public service provision in these areas.

Economic and social robustness of local communities is in other words a key word in the vision for the NSPA in 2020. Strategies must be designed to increase their resilience facing external shocks, e.g. through diversification, a strategic choice of economic niches and measures to increase the circularity of local and regional economies. More generally, NSPA development models in a 2020 perspective need to incorporate the risks connected to a context of geopolitical, climatic and economic uncertainty. The “wild card”<sup>6</sup> exercise in the workshops helped identifying some options that would drastically change the economic and social framework conditions if they occur (Text Box 14). Without considering that one would need to prepare for any of these in particular, the ambition of the NSPA is to promote a development model that would increase the overall robustness of local communities. In economic terms, a focus on knowledge intensive activities is seen as offering long term guarantees for maintaining a high capacity of adaptation.

The infrastructure vision focusing on the coherence of regional transportation systems within the NSPA is also an element of this focus on robust development. Larger labour markets based on sustainable modes of transportation, more integrated regional industrial systems and an efficient organisation of flows of goods and passengers offer the best perspectives of high and stable long term economic growth. While NSPA industrial exports presuppose a good external accessibility, this does not only imply an improvement of north-south connections to European core areas, but also presupposes that connections to Russian, North-American and Asian markets are developed. It is therefore important to note that the transport vision of the NSPA does not necessarily fit with the Trans-European Network’s (TEN) focus on European integration. As a periphery and interface to Russia and the Arctic, the NSPA needs to critically consider European-centric perspectives on infrastructure development.

---

<sup>6</sup> A wild card is defined as “a future event with a relatively low probability of occurrence but a likely high impact on the conduct of business”.

**Text Box 14: Selection of NSPA “Wild cards” mentioned in the workshops**

**Technology**

Nuclear power plant accident

Efficient and high capacity batteries - Electric cars become a real option for the NSPA

**Natural disasters**

Gulf Stream stops – polar climate in the NSPA

Global warming accelerates – the NSPA become the last areas in Europe with snow

Massive inflow of climate refugees to the NSPA

Flooding caused by climate change

Large forest fire

Endemic – Ebola<sup>10</sup>

**International relations**

NSPA falls apart, national authorities override

EU is disbanded

Norway joins the EU

Russia closes energy supply to Europe

War in the NSPA area because of energy crisis

**Economy**

Oil price goes up to 500 \$ / barrel

Asian “takeover” in the world economy

Depression deepens to the level of 1930s

World finance collapses

The sparse settlement patterns, long distance and high dependence on air connections make the NSPA particularly dependent on energy for their continued development. While these regions are particularly richly endowed in energy resources, with gas and oil fields in the Barents Sea, hydro-electricity, extensive bioenergy potentials, wind energy, wave energy and waste energy from industrial plants, the market dynamics within which their production is organised imply that they cannot be presumed to be available for regional needs. This fragile situation in terms of energy supply is by no means unique to the NSPA; major metropolitan regions have developed on the basis of a massive and constant supply of energy, without which their provision of food and general functioning would come to a halt. We however have to acknowledge that the Foresight and Vision exercise has come a short way thinking of development models that would be adapted in a context of strong increases in energy prices and/or difficulties in energy supply. The discussions on this topic have however emphasized that this is a matter of changing attitudes and behaviour, as much as of designing new technical solutions or planning schemes.

Irrespective of these challenges, the importance of the NSPA as a supplier of energy for the European Union must be underlined. In addition to fossil energy in the Barents Sea, the NSPA indeed has extensive forest and peat reserves and is a forerunner in the exploitation of bioenergy and in applying associated energy-saving technologies. This is a further justification of transnational policies ensuring that the potential resources of these regions will be rapidly available for exploitation if evolutions on the world markets or geopolitical events call for it.

This type of positioning of the NSPA in European and global contexts is an essential component of the Vision. It is in other words not only about changing the “ground realities” of the regions, but also the way the general awareness their role in European production systems as stable and reliable suppliers of high quality raw materials, goods and services. Branding and communication is needed to highlight this role of the NSPA in transnational industrial processes, as well as more generally in economic and ecological systems. The objective is to demonstrate that regional policies, for example addressing the above described demographic challenges, can be beneficial to Europe as a whole.

This wider European ambition of the NSPA also implies that there is a need to position the NSPA in relation to a prevailing discourse on how growth and development can be obtained. This is what we call the “reactive visions”, whereby individual stakeholders formulate their view of a desired future state not only based on the realities and potentials of their home regions, but also as a reply to more or less explicit visions formulated for Europe as a whole. Typically, the NSPA understanding of European polycentricity would not be based on “counter-balancing Pentagon” but on maximising the potentials of each region by developing its international connectivity and capacity for knowledge based development. Workshop participants emphasize the importance of acknowledging the diversity of regional settings, rather than presuming that they should compete as if they were on an equal footing.

The issue is in other words not only to imagine a desired future state of the NSPA, but also to define what NSPA actors would like their regions to stand for in the eyes of Europe. Most reactive stances of workshop participants are inspired by a general refusal to see NSPA regions being dealt with as a ‘periphery’. They see their home regions as drivers of economic and social development, as actors of a worldwide knowledge economy, as enablers of growth within and outside their regions, rather than as recipients of external trends and stimuli. A position on the outer margins of the European continent shall not imply a situation of economic and social peripherality.

The political ambition expressed by the NSPA through the Vision is therefore to ensure that its growth potential and general importance for European economic development is recognised. At the same time, it needs to be acknowledged that sparse population patterns can require regulatory special treatment, measures to preserve local communities from external shocks and relatively higher costs in terms of infrastructure investments and public service provision. Taken in combination, these elements form the basis for the branding of the NSPA as a 'Strong, Specific and Promising' European macro-region.