# BUSINESS INDEX NORTH

A periodic report with insight to business activity and opportunities in the Arctic



# People

Gives an overview of the human dimension in the North, including demography, education, quality of life and work. Business

Maps growth potential of the BIN area and highlights selected innovative clusters, companies and brands.

#### Connectivity

Focuses on the roles of maritime transport, digital infrastructure and broadband availability in increasing connectivity of the BIN area.

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#### Project partners

Consortium partners responsible for R&D and technical work related to the production of BIN report:











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> Cover Image People riding snowmobiles on the frozen lake at winter Rovaniemi, Lapland, Finland

## What is BIN?

Business Index North (BIN) is a project that contributes to sustainable development and value creation in the Arctic. The overall goal is to set up a recurring, knowledge-based, systematic information tool for stakeholders such as businesses, academics, governments and regional authorities, as well as media, in the Arctic states. The coordinator of the BIN project is the High North Center for Business and Governance at Nord University Business School (Norway). The project is implemented through the international network of partners from Norway, Sweden, Finland, and Russia. Nordland County Council (Norway) and The Norwegian Ministry of Foreign Affairs provide basic funding for the project.

This is the second "Business Index North" periodic analytical report that focuses on socio-economic developments in ten northern regions of Norway (Finnmark Fylkeskommune, Troms Fylkeskommune, Nordland Fylkeskommune), Sweden (Norrbottens Län and Västerbottens Län), Finland (Lapin Maakunta, Pohjois-Pohjanmaan Maakunta, Kainuun Maakunta) and North-West Russia (Murmansk Oblast' and Arkhangelsk Oblast'). These ten regions as statistic units corresponds to NUTS3 classification of territorial units introduced by the European Union. Hereafter in our report, we use the English names of these regions without word "region" from each corresponding language (e.g. Norwegian "Fylkeskommune", Finnish "maakunta", Swedish "Län", and Russian "Oblast'" are abandoned):

Country

#### Regions analyzed

Norway	Finnmark Fylkeskommune
Norway	Troms Fylkeskommune
Norway	Nordland Fylkeskommune
Sweden	Norrbottens Län
Sweden	
Finland	Lapin Maakunta
Finland	Pohjois-Pohjanmaan Maakunta
Finland	Kainuun Maakunta
Russia	Murmansk Oblasť
Russia	Arkhangelsk Oblast' <sup>(1)</sup>

#### Names used in the BIN report

Finnmark
Troms
Nordland
Norrbotten
Västerbotten
_apland
Northern Ostrobothnia
Kainuu
Murmansk Region
Arkhangelsk (without NAO)

Altogether, these 10 regions are referred as the "BIN area" (figure right). Our definition of the BIN area correlates with the EU concept of a macro-region<sup>(2)</sup>. The BIN area runs across national borders has, common characteristics and challenges. The BIN area can be viewed as a strategic layer across countries for future development and cooperation.

<sup>1</sup> In this report, Arkhangelsk Oblast' (Region) excludes the Nenets Autonomous District (NAO). Although NAO is an administrative part of Arkhangelsk Region, in statistics they are normally considered as distinct subjects of analysis

<sup>2</sup> An area including a territory from a number of different Member States or regions associated with one or more common features and challenges (EU definition).



The BIN regions are compared with each other and also with the developments in their respective countries. As a basis for comparison for the Russian BIN regions we selected the Northwestern Federal District of Russia. This is a North-European part of the country which is more easily compared to the neighbouring Nordic countries and their northern regions. At the same time, Murmansk and Arkhangelsk regions are under the administrative jurisdiction of the Northwestern Federal District. Our plan for future reports is to gradually include in the analysis more northern territories of Russia, as well as the USA, Canada, Denmark (Greenland) and Iceland. The present report gives both an overview and a detailed picture of the socio-economic development and business opportunities within the BIN area and highlights the following topics of major relevance for the area: People, Life, Work, Performance of Business, Innovations, Connectivity, and Maritime Transportation through the Northern Sea Route. Businesses should be able to use it to learn more about economic developments, investment opportunities and challenges. Local, regional and national authorities will be able to identify problems and regional development opportunities, and take decisions for political and regulatory support focused on the BIN area as a whole. For media stakeholders the report will make it easier to describe the development in a reliable way.

#### **Executive Summary**

The BIN Report represents a rigorous scientific approach based on proven transnational collaboration between academic researchers and project partners that have first hand familiarity with local conditions. The findings of the BIN Report contribute to the economic, social and environmental sustainability of Arctic Communities through increased global awareness of business opportunities in the circumpolar Arctic and High North Economic Region.

The BIN Report provides comparable indicators and indices that reflect wider social processes and economic change in the BIN area during the period 2007-2016. The BIN area includes eight northern regions of Norway (Finnmark, Troms, Nordland), Sweden (Norrbotten and Västerbotten) and Finland (Lapland, Northern Ostrobothnia and Kainuu) and two Russian regions (Murmansk and Arkhangelsk region without the Nenets Autonomous District). The report comprises seven key topics organized as chapters: People and the North, Life and the North, Work in the North, Business in the North, Innovations from the North, Maritime Transportation in the North and Connectivity in the North.

# Key findings:

#### People, Life and Work

- The population growth in the Nordic BIN area is 2.7 times slower than in the Nordic countries <sup>(3)</sup> as a whole.
- The population in the BIN area including the Murmansk and Arkhangelsk (without NAO) regions has decreased by 3.1%.
- The BIN area's population is ageing, population aged 65+ grew by 13.3%, while population aged 0-19 declined by 7.5%, aged 20-39 declined by 6.8% and aged 40-65 declined by 3.7% during the period 2007-2016.
- Tertiary education attainment for 20–59 year old males <sup>(4)</sup> lags by 5 percentage points behind the average of the Nordic countries and by 3 percentage points for females in that age group
- Life expectancy at birth in the Nordic BIN area is higher by 13.6 years for males and 7.6 years for females than in the Russian BIN area.
- Disposable income is lower in all BIN regions (except Murmansk region) when compared to the national average
- Employment development in the Nordic BIN area lagged behind the national average during 2011-2014, but had started to catch up during the period 2015-2016.
- Employment in the BIN area is affected by the loss of jobs in mining, quarrying and manufacturing, agriculture, forestry and fishing and job creation in the human health and social services, real estate, professional, scientific activities, accommodation and food service and construction.

#### Business Activities, Innovations and Value creation

- BIN area business has already developed a significant innovation potential in terms of clusters, brands, successful companies – an issue often overlooked when the region is viewed on the basis of natural resources; many innovative businesses and brands build upon identity with Northern life style and values.
- The most successful companies in the BIN area are those with higher growth opportunities, sound value performance, yet a less aggressive approach to innovative competitiveness. They serve as a shining example of companies able to grow despite limited access to financing and human resources compared to companies in the capital areas.
- BIN area's business turnover grew by 87 % from 2008 to 2016 and 18 % from 2012 to 2016. Turnover exceeds 90 billion Euro in 10 BIN regions.
- Most successful businesses are North Norwegian aquaculture firms, Real estate developers in Norway, business activities related to the mining industry in Arkhangelsk Region, and Manufacturing based on electric energy.
- Nordland has the largest economy of the BIN area, sharing high growth with now merged Troms and Finnmark region.
- Gross Value creation in the BIN area reached 71,4 billion Euro, growing 12,2 % between 2011 and 2015.
- Again, Nordland has the largest value creation, while Murmansk and Arkhangelsk (without NAO) regions constitute the highest proportion of value creation in the national territory.
- High growth in value creation can be found in aquaculture, finance and construction.

#### Maritime transportation

- Altogether 129 shipping companies were operating on the Northern Sea Route (NSR) in 2016; 75 were Russian companies and 54 non-Russian. The majority of non-Russian shipping companies operating on the NSR in 2017 were Norwegian, with 11 vessels making 92 separate voyages.
- Internal Russian traffic (cabotage) and destination traffic between Russian ports and non-Russian ports are the most common means of transport on the NSR. The total volume of cargo transported along the NSR in 2016 was 7.5 million tons and 10.5 million tons in 2017. The south-western part of the Kara Sea had the highest traffic density on the NSR in the period 2016-2017.
- The main driver of increased shipping on the NSR will continue to be exploitation and transport of natural resources out of the Arctic to markets in Europe and North-East (NE) Asia.

#### Connectivity

- Basic fixed broadband is available to 95% of households in the Nordic BIN regions and to 75% of households in the Russian BIN regions.
- The regions of Troms, Nordland (Norway) and Norrbotten (Sweden) lag behind their country averages in 100 Mbps fixed broadband availability by 8 percentage points and 7 percentage points respectively, while the Finnish regions of Northern Ostrobothnia, Kainuu and Lapland outperform Finland's average by 8 percentage points.
- Mobile broadband coverage (3-4G) is good over all populated places in the BIN area. In terms of territorial coverage in 2016 the BIN regions in Norway had the best coverage lagging behind the national average by only 3 percentage points, Swedish BIN regions lagged behind by 14 percentage points and the Russian BIN regions lagged 21 percentage points behind their respective national averages.
- The BIN area has no direct connection to Europe and North America via subsea data cables. A number of landing points of data cables to Europe are on the coast of South Norway, South Sweden and South Finland. North-West Russia has one subsea data cable to Finland. Direct trans-Atlantic data traffic between Europe and North America proceeds through 12 submarine data cable systems landing in Denmark, UK, The Netherlands, Germany, France, Spain and Portugal.

#### **Recommendations:**

- Depopulation in the BIN area, especially of young people, is to be addressed by interlinked policies in education, work, living conditions, quality of life and infrastructure including transport and digital infrastructure in the North.
- Policies should address how to reduce the tertiary education and disposable income gap in the BIN area.
- High economic potential but at the same time loss of jobs in traditional BIN industries such as mining, quarrying and manufacturing, agriculture, forestry and fishing requires policies on the role of automation and digitalization.
- Education needs and business opportunities in the growth sectors of health, tourism and construction are to be examined further.
- Reconsider the innovative potential of the BIN area, create awareness of the BIN area clusters, firms and brands
- Provide the required regional and national support to BIN firms including access to finance.
- Business opportunities brought by the Northern Sea Route are to be addressed in the perspective of the whole transport infrastructure development in the BIN area, including Finnish railway project and digital infrastructure projects.
- While basic broadband accessibility is good in the BIN area, access to high-speed speed Internet (100 Mbps) is to be improved in the BIN area.
- Increased business opportunities in the BIN area require improved mobile broadband coverage in unpopulated areas
- The roles of the governments and strong consortia are to be addressed in fibre cable projects affecting the BIN area.

<sup>3.</sup> Norway, Sweden and Finland

<sup>4.</sup> BIN area (excl.Russia)