

Interreg Aurora Programme 2021-2027

Interreg Programme document for public hearing

Interreg



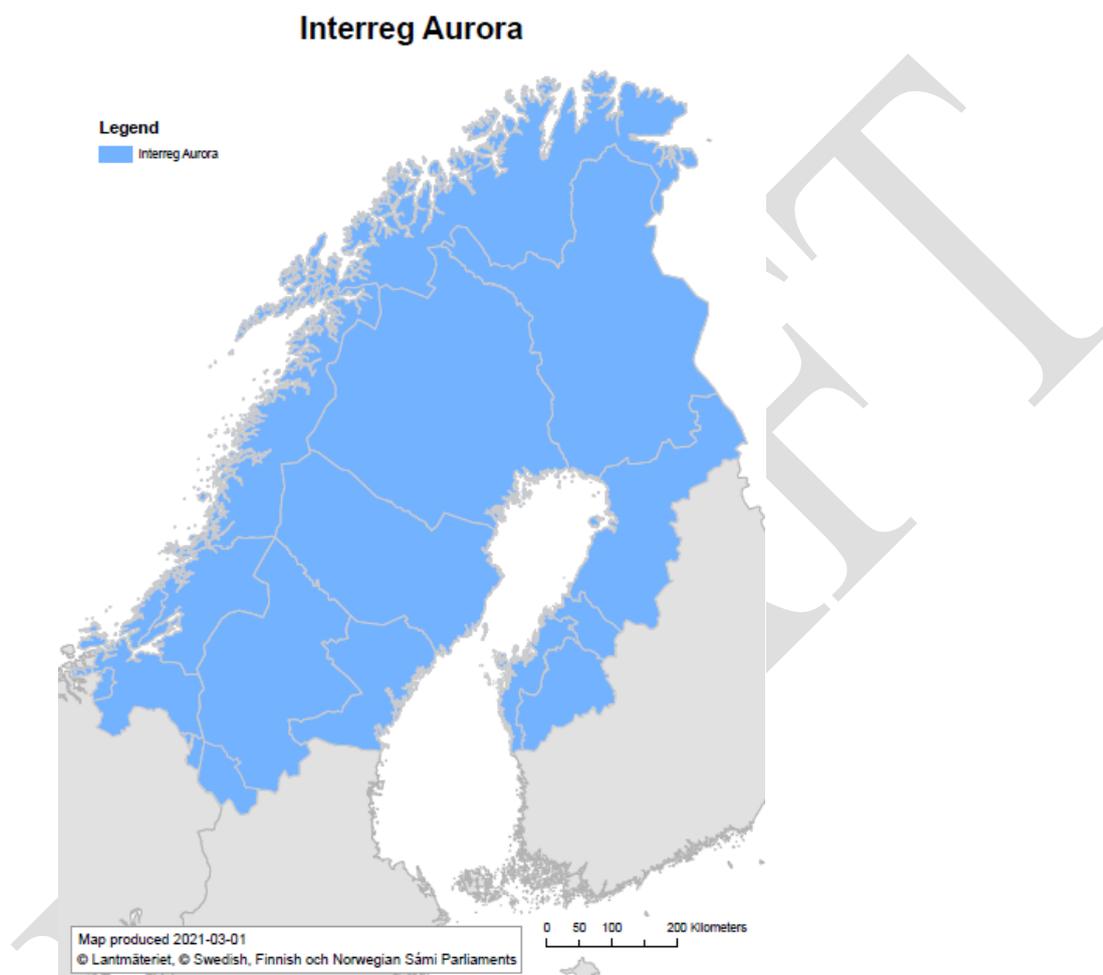
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1. Programme strategy: main development challenges and policy responses

1.1 Programme area



Interreg Aurora programme covers a total area of about 570 000 km² and encompasses the following NUTS III regions:

Sub-area Aurora

FINLAND: Lapland, North Ostrobothnia, Central Ostrobothnia, Ostrobothnia, South Ostrobothnia

SWEDEN: Norrbotten, Västerbotten, Västernorrland

NORWAY: Nordland, Troms and Finnmark

Sub-area Sápmi:

FINLAND: Lapland, Northern Ostrobothnia, and Central Ostrobothnia. In addition to the official area of the Sámi homeland (the areas of the municipalities of Enontekiö, Inari and Utsjoki, as well as the area of the reindeer owner's association of Lapland in Sodankylä), the geographical area of the sub-area Sápmi covers the entire region of Lapland, and the regions of North Ostrobothnia and Central Ostrobothnia.

SWEDEN: Norrbotten, Västerbotten, Västernorrland and Jämtland, as well as Idre Sameby in Dalarna.

NORWAY: Troms and Finnmark, Nordland and Trøndelag as well as parts of Innlandet (Elgå Reinbeitedistrikt)

1.2 Summary of main joint challenges

Joint, overarching challenges in the Aurora region

The overall goal of the Interreg Aurora programme is to encourage cross-border collaboration, thereby strengthening the programme area's competitiveness, sustainability and attractiveness through social inclusion, digitalisation, and green transition.

Increased globalisation requires regional cooperation between small countries in order for them to be more competitive. The Nordic countries have a long tradition of cooperation, and the northern parts of Sweden, Norway and Finland are united by historical common values, but the linguistic and cultural barriers can hinder a continued effective exchange of information and business activities across borders. The Interreg Aurora programme therefore strives to influence attitudes and approaches in order to minimize tangible and mental border obstacles in collaborative projects, and to promote cross-border projects in order to be able to develop the region together in a smart, sustainable and inclusive manner. The ambition is for different thematic areas together to form a complementary structure, where each component is seen as an important part of an attractive, prosperous, and connected region.

The area is vast and accommodates a mixture of sparsely populated areas in the north and higher population density areas in the south. The demographic development in the area will likely experience an overall population decrease, although some (mainly) coastal areas have a forecast of growth. The population is ageing which causes a smaller proportion to be of working age over time, especially in rural regions. This leads, among other things, to inferior conditions of being able to meet the business community's need for labour, to maintain a satisfactory range of services and for the possibility of achieving a critical mass.

The critical mass is important in order to be able to transfer knowledge, influence people or carry out certain processes that are important for the socially and ecologically sustainable development of the region. Gender equality is also important for creating attractive regions.

Sápmi

The Sámi are an indigenous people of Finland, Norway, Sweden, and north-eastern Russia. Although the Sámi are divided by the formal borders of states, they are one people, united by cultural and linguistic bonds and a common identity. The Sámi people have, as an indigenous people, the right to self-determination both at the national level and across borders and the right to live as Sámi people.

The Sami people have their own culture, social life, history, traditions, industries, their own languages, and their own visions for the future. It is important that the Sami culture; the Sami languages, the Sami industries and the Sami community life may develop and live on. The Nordic countries have ratified the UN Declaration on the Rights of Indigenous Peoples, which creates security for Sami culture with a real influence on the economic, social, and cultural development in Sápmi. The demographic development in the Sámi area follows the same pattern as other rural areas in the north.

The programme area covers the traditional Sámi region - Sápmi - which means that the program is an important resource for the safeguarding and development of the Sami culture, livelihood, industries and above all the Sami languages.

Research, development, and innovation

Of almost 8 000 research and development FTEs (man years/full time equivalents) in the private sector in the programme area, half are in the Oulu region in North Ostrobothnia. Oulu, with one of the major universities in Finland, has spawned a significant increase in R&D (research and development) even outside the university. The numbers on research and development expenditure should though be treated with some care, as the split between private sector, public sector and university sector expenditures might differ between the countries in statistical data.

On the European innovation scoreboard, the Interreg Aurora Programme area falls into the "Strong Innovator" category, which is, below the Innovation Leader regions in Europe but above the average European innovation performance. North Norway is characterized as strong innovator by Regional Innovation Scoreboard. In Finland, North and East Finland (including e.g., Lapland, Northern Ostrobothnia, Central Ostrobothnia) is characterized as Strong+ innovator whereas West Finland (Ostrobothnia, Southern Ostrobothnia) as Leader – innovator. In Sweden, Övre Norrland (Norrbottnen, Västerbottnen) is considered as Strong+ whereas Mellersta Norrland (incl. Västernorrland) as Moderate + innovator.

There are a number of research institutes and higher education institutes in the region, which have an impact on the focus of both large and small communities. With the use of digitalisation, the region can become independent of the long distances and thus use the technology so that all parts of the region can take part in the knowledge development of different research actors. One result of this is that several of the research and higher education institutes have been able to position themselves in specific areas, despite small research environments, and as such, are important for the development of the region. These research environments need to be

emphasised and highlighted at both the Nordic and European levels as they tend to be overlooked due to their small size.

To more clearly demonstrate the importance of research outside the most central regions at EU level, the northern sparsely populated areas need to highlight opportunities to focus on the needs of local industries and develop close relationships that make it possible to innovate in small scattered R&D teams. The area can show how this type of activity well complements the larger centrally located research institutions that the EU has focused on. The Interreg Aurora programme should function as a platform and a first step towards international research programmes such as e.g., Horizon Europe and Life.

Sápmi

The Sami research institutions are small with limited resources and capacity but with great competence on Sami society, businesses, languages, environmental science, and Sami handcraft. Different national universities conduct research on Sami issues. Nevertheless, the dedicated research institutes need to be strengthened for the Sámi to have an ownership over the research results.

Entrepreneurship

Although there are some large and important companies in the Aurora area, the vast majority of enterprises (99%) are small, with less than 50 employees. A large fraction of the small companies are personal enterprises with no employees at all. Almost all new enterprises have none or at most a few employees. The Aurora regions micro-, small- and medium sized enterprises (MSME's) and start-ups are a key to the twin transition to a green economy, to creating decent jobs, and to supporting our communities. In order to support them in realising their full potential, we need to make the region the most attractive place to start and grow a business.

The large proportion of MSME's mean that companies need to collaborate across borders to gain access to knowledge and other resources in order to strengthen their competitiveness on the market. Increased collaboration between companies, between existing and new companies as well as across industrial sectors is particularly important in order to find new business opportunities and a developed collaboration for increased profitability.

Companies in the region need to take advantage of the opportunities that exist in new markets and thus it will be important to minimize border obstacles. Future opportunities for increased competitiveness can also be achieved through skills development, product development and further processing of products. A good capacity for innovation and renewal is crucial for regional competitiveness. Prerequisites for the development of regional cross-border innovative environments thus need to be strengthened, as well as the promotion of entrepreneurship and the degree of internationalization of companies and the development of a more diverse business community that includes new industries, and through new business models, women entrepreneurship and diversity in entrepreneurship.

There are still marked differences between gender in entrepreneurship, board memberships and leadership positions in companies. About 70% of entrepreneurs in the Swedish and Finnish parts of the programme area are men: although, the gender differences are much more marked in stock companies than in personal enterprises. In Northern Norway, 63% of new personal enterprises are being started by men, and 80% of CEOs and board members of stock companies are men.

Entrepreneurship has an important role to play in encouraging under-represented groups to see entrepreneurship as a good career opportunity. When there is a clear link between industry, business or societal challenges related to the world in which young individuals will grow up, young people's interest in working with entrepreneurship and business is strengthened. Research shows that this has the potential to increase women's interest in science, technology, and innovation.

It is important that young people are adapting a dynamic approach rather than a static one. Organizations promoting youth entrepreneurship are seeing a growing need to work in a more targeted way with sustainable entrepreneurship and circular economy, whose business models are based on reusing, repairing, and treating waste as a resource - doing more with less. Young entrepreneurs thus need to be supported with knowledge and resources to identify concrete problems and come up with sustainable solutions.

MSMEs in the programme area are experiencing consequences of the Covid-19 pandemic. This affects the entire scope of the business community but has not least affected the tourism industry. The tourism industry has also been particularly important for a varied labour market and for maintaining attractive services and cultural offers, which are often larger than the local population indicates. This has resulted in a specific effort in the Aurora programme to tackle the challenges due to Covid-19 within the culture and tourism sector.

Sápmi

The Sámi area has a low percentage of private businesses and there is no official statistical data on the range of the Sami businesses sector and trades, nor data about Sami companies. The public sector is important for employment, particularly in municipalities with Sámi institutions. Most of the private businesses are micro companies with one or two employees. Traditional Sámi industries like reindeer herding, fishing duodji (Sámi handcraft) and agriculture are important for employment in some areas of Sápmi.

Climate change adaptation and risk prevention

Climate change doesn't know borders. The Green transition and sustainable use of natural resources and adaptation to a different climate, as well as international initiatives such as the EU Green Deal, the EU climate change strategy and EU Strategy on adaptation to climate change, are highly prioritized in the program area and since the area is partly very industrial it has significant effect on the programme area. To prevent and adapt to issues like the impact of climate change on e.g., biodiversity, traditional livelihoods, the risk of increased incidence of

fires and extreme weather conditions and coherent risks, need broad partnerships and benefit from cross-border cooperation and collaboration.

The industry structure in the Interreg Aurora region presents a combination of sustainable utilization of natural resources and initiatives to promote advanced technology. The sustainable use of natural resources needs to be defined and developed in the context of and in relation to other livelihoods e.g., tourism and traditional Sami livelihoods.

Climate change is affecting all sectors of society, not least those sectors that are wholly or partly dependent on functioning ecosystems and ecosystem services e.g., tourism, agriculture, forestry, Sámi traditional livelihoods. Actors in the Aurora region need to find ways to adapt to the new reality of a rapidly changing climate while still ensuring livelihoods.

Cultural and natural heritage can also be affected and damaged by climate related events and e.g., Unesco has identified climate change as one of the main risks to World Heritage. The World Heritage Committee suggests making a plan for adaptation to a changing climate. The World Heritage Sites could be pilot environments for innovative solutions and climate research on natural and cultural heritage and for developing tools and risk management plans to support management that can benefit other natural and cultural environments.

Sápmi

The abovementioned impacts of climate change on the Arctic and its environment also affects the Sámi society, traditional livelihoods such as reindeer herding, fishing, and hunting, Sámi culture and well-being. Commercial and extensive use of Sámi lands and waters for i.e., industry, infrastructure and extraction of natural resources are already imposing great challenges to the Sámi people and their rights. The impacts of climate change as cumulative effect must therefore be understood in this context and addressed accordingly.

The consequences of climate change and the threats and challenges they create are experienced by Sámi reindeer herders, fishers, and hunters first-hand daily. One example is unreliable (thin, irregular, or no) ice sheets on lakes and rivers which prevents or increase risks when fishing and using the ice for transportation. Another example is the increased practice of reindeer herders having to supplementary feed reindeers in enclosed pens wintertime due to ice covered grazing lands - a practice deviating from traditional free-range reindeer herding. Increasing temperatures moves the tree line further up the mountains and thus decreases the space and habitat for mountainous species in the Scandes. Cross border collaboration to develop Sámi climate change adaptation plans and strategies to assess and avoid risks are ways to address these challenges.

Living close to nature and working in the Arctic landscape, indigenous peoples such as the Sámi are not only witness to the effects of climate change. They are also experts on how to address these effects and undertake measures to adapt and prevent them. Although *árbediehtu* (Sámi traditional knowledge); including Sámi values, practices and holistic understanding of the interlinkages between people and nature/environment play a key role in mitigating and adapting to climate change it is currently not recognized or included adequately in decision making or

development of climate policies and strategies.

Protection and preservation of biodiversity and green infrastructure

There is a large number of Natura 2000 sites and nationally designated areas of protection, including several important trans-border natural areas and connected cross-border ecosystems in the region. There are also a large number of ‘Ramsar’ sites (internationally important wetland site) within the region, including both coastal and inland sites in all three countries. However, most of the area is not protected by law or voluntary provisions.

The Aurora region includes substantial terrain, which is rated high on the Wilderness Quality Index, with northern Norway, Sweden (Norrbotten) and Finland (Lapland) in particular containing large areas that are part of the top 10% of the unmanaged areas in Europe.

There are multiple rivers and water courses that ultimately (in almost all cases) flow into either the Baltic Sea via the Gulf of Bothnia or, in fewer cases, into the Barents and Norwegian Seas, and thus are of key importance to the quality of the surrounding seas.

Around the Baltic Sea in the programme area and in the border region between Norway and Finland, the rivers have a high recreational benefit for the sport fishing and for the tourism industry, because of the unregulated rivers without hydropower plants. On account of these regulations e.g., Torne and Kalix rivers together produce 90% of the wild Salmon stock in the whole Baltic Sea.

Changes in vegetation and the presence of invasive species can lead to unforeseen changes in the behaviour and movement patterns of animals this in turn can have effects on e.g., agriculture and forestry, as well as outdoor life and tourism industry.

Sápmi

Biodiversity and healthy ecosystems are crucial to Sámi ways of life, culture, languages, food systems, health and wellbeing and livelihoods. Fragmentation of green infrastructure decrease of habitats, flora and fauna, invasive species such as the contorta pine affect all of Sámi society. Especially visible are the impacts of biodiversity loss on reindeer herding, hunting, and fishing as important parts of Sámi culture and sustenance, food security and related rights.

A long-term perspective and a sustainable way of life have always been the basis for the traditional livelihoods. Through combined use of traditional and modern trades and intergenerational transmission of traditional knowledge, this is still embedded in the Sámi land use and culture. Sámi customary sustainable use and *árbediehtu* are thus important contributions to land and water biodiversity conservation and protection and must be recognized as such in decision making and management related to biodiversity.

Areas managed by the Sámi under various types of tenure or access regimes are facing growing resource extraction, commodity production, transport, and energy infrastructure, with various

consequences for local livelihoods, health, and well-being. Strengthening of inclusive governance models and community-based management as well as safeguarding Sámi land rights are key to the protection and preservation of biodiversity and green infrastructure.

Transportation and traffic chains

Even in the sparsely populated areas, most of the population, businesses and industry are concentrated to urban areas. Most of the travel and transport is within these urban areas, between hinterland and the cities or commute into cities.

Mobility is about much more than just getting from point A to point B. It means being able to access education, culture, employment etc using save, efficient and environmentally friendly transport options. Mobility means the ability to participate in society and to have a functioning region. The way we use transports is rapidly changing, we need sustainable and green innovations and new concepts for combining different means of transport. In order to create and sustain attractive regions, we need accessibility. We want to develop our region and retain the current population as well as making it possible for more people to live and work here. This includes encouraging people to live in rural areas in order to turn around the rural decline and increase attractiveness. Accessibility in the form of efficient urban-hinterland connections is essential for this scenario to work.

Even though the Aurora region is sparsely populated and have few urban nodes, the region is on the rise and there is a will to develop and prosper. The region is in many ways a frontrunner for the green transition, with its emphasis on environmentally friendly technologies, digitalization, Arctic knowledge etc. In order to promote this development, we need to have strong urban areas that are functioning in our own context, the vulnerable Arctic region.

A transition to more climate-friendly modes of transport within urban areas and between urban centres and hinterlands for both raw materials, goods and passengers means that the entire transport chain can adapt to the same emissions reducing goal.

Education, training, and lifelong learning

The programme area lags behind the rest of the countries when it comes to people with higher education, with a few percentage points of their respective populations. There is a large difference in the educational level between urban and intermediate municipalities, where institutions for higher education are located, and rural municipalities. The proportion of people with a higher education (completed in Norway/Finland, started in Sweden) is 15-25% higher in the most urban municipalities than in the most rural.

In order to meet future opportunities and challenges, based on technology, globalisation, urbanization, environmental responsibility, and demography, it is necessary that the labour market can be adapted. Structural transformations always place demands on the workforce's adaptability in the existing workplace, on the conditions for the individual's adaptation and on labour market policy.

The region is characterized by long distances to education centres and activities should encourage the educational providers to focus on improving access to education by providing digital learning environments and methods.

Uncertainty about the languages, negative perceptions about the working culture in the neighbouring country, lack of knowledge about the labour market in the other country, lack of a social network across the border, confusion about the rules that apply as a cross-border commuter and/or a fear of encountering border obstacles. Additionally, the rapid shift towards a climate neutral Europe and digital transformation leads to many sectors undergoing technological change. Digital skills are needed for virtually all jobs.

The transition to a low carbon and circular economy means creating and adapting to new business models and job profiles. High and diverse skills enable people to adapt to unforeseen changes. The ability to develop sustainable and innovative business models also places demand on competence in inclusion, attitudes, and culture in businesses, and that a diversity of skills, experiences and differences are utilized as assets and opportunities for strengthened competitiveness and attractiveness.

Sápmi

The Sámi strive to have control and influence over the Sami traditional knowledge, Arbediehtu, which is a matter based on international law and its regulations on self-determination. Arbediehtu is one of the core elements for the Sami culture, languages, Sámi business and health care and the need for knowledge and education is similar for the entire Sámi area.

According to experiences from previous Interreg Nord programs the educational cross-border cooperation within Sápmi is needed. Partly because enhance and sustain the quality of Sami educations and partly to find out the synergies and increase efficiency for Sami educational organisations.

The Sami languages are identity markers and carriers of attitudes, knowledge, and experiences, and are therefore an important area of development for Sami society. Sami languages are not constrained by country borders and they have common challenges for survival. The Sámi areas are in huge need of competence in the different Sámi languages and cultures, particularly in the public sector like health care and education for all ages. The possibilities to receive higher education taught in different Sámi languages and adapted to the needs of the labour market are limited.

Culture and sustainable tourism

Creating a desire to travel for national and international visitors, the tourism industry contributes to maintaining important infrastructure and to the development of viable and attractive local societies. The industry is an important premise for job creation, services, and housing in many of the regions in the Aurora programme area.

The recent dramatic downturn of international tourism caused by the Covid-19 pandemic puts tourism in a new, unexpected situation. For example, in the Interreg Nord area, during the year 2020, the number of the overnight guests have been decreased 30%. In the post-Covid-19 time it will be even more important to rethink tourism in a sustainable way, which will take in account both the local communities and environmental values.

Sustainable tourism is a tourism that takes full account of its current and future economic, social, and environmental impacts, addressing the needs of visitors, the industry, the environment, and local communities. Tourism prior the coronavirus crisis developed rapidly, although in different growth paces across the programme area. While tourism brings important benefits to many northern communities, the potential risks to the delicate arctic environment and to traditional ways of life through over-tourism at certain destinations cannot be ignored.

The attractive but fragile arctic climate and environment, natural phenomena and cultural diversity are the key factors that attract tourists to the region. Tourism and culture sectors create opportunities for employment (self-employment, MSMEs etc.).

Culture and arts support social development in communities, increases the feeling of belonging and the social identity in many kinds of associations and networks. In addition to increasing employment, arts and culture have in depth values to human beings. It is important to support wellbeing opportunities of the society, whether they are provided by leisure time interest groups or produced professionally.

Some of the prerequisites for being able to further develop a sustainable tourism lie in increased professionalization, marketing, and the availability of experiences. Accessibility is still important factor for the development of tourism, not only for the export but also for the local communities and domestic tourism.

Culture covers all arts and artistic impressions, habits, and traditions: cultural history, dance, theatre, music, visual and performing arts, language, literature, film, museum, cultural heritage, cultural environment, and archives. Contemporary cultural industry is today characterized by easy access with broad visibility, and digitalisation and artificial intelligence are used as tools.

Intangible cultural heritage is traditions, customs, and usages, which have been passed down between generations. For example, various forms of crafts, rituals, music, and stories. Intangible cultural heritage is beyond national borders, constantly alive and changing.

The programme includes three countries with indigenous people and minority language groups with multiple cultures and languages. This in itself is an asset that the programme area should seek to benefit from. The culture of the Aurora region is also an important driving force to strengthen people's creativity and create local and regional cohesion. Just as it is important to communicate and animate the regional community in language, traditions, and cultural heritage, it is also important to create preconditions for the development of future common cultural heritage.

Traditional livelihoods and utilization of the nature are integral part of cultural values, and the loss of traditional knowledge is seen as a prominent threat and challenge in the programme area, especially in the light of depopulation and aging. Attractive, vital local communities where people want to live are composed of diverse cultural offerings, including nature, art, and locality. The joint action creates sense of togetherness which fosters social inclusion. Culture in the programme area is already transnational, created by and continuously modified by cross-border networks. In the region, there are conditions for artistic creation that explores new areas, transcends boundaries, and makes various aspects of our existence visible.

The definition of cultural and creative industries is architecture, visual arts, media and communication agencies, arts and crafts, photography, film and TV, literature, music, press, performing arts, games and gamification, and tourism.

Companies in the cultural and creative sector contribute to new possibilities and development of other industries such as nature-based industries and are also strengthening the conditions for the companies in the tourism industry by contributing to attractiveness and experience values in places. The creative industry and innovation have a strong impact on economic growth in the region and is important for expanding the labour market, contributing to become more equal, increasing the power of innovation and diversification, strengthening the regions business life and contribute to attracting a variety of talents and professionals to the region.

Sápmi

The Sami tourism and experience industry are growing both locally and globally and the Sami hospitality industry has great development potential. There is generally a strong will for an increased Sami involvement in tourism that produces attractive fishing, eco-, cultural and nature tourism of high quality and with sustainability and consideration for nature's resources in focus. That is why it is important to ensure the quality of Sami tourism and its products.

Development of *arbediehtu* means, transferring the knowledge, which is linked to the traditional Sami livelihood, within Sami businesses and livelihoods. The central part in this transformation is also the Sami languages and the interaction with nature. *Arbediehtu* is the core element for the Sami culture, languages and for the Sami businesses.

Cross-border cooperation and institutional capacity

Cross-border cooperation cannot be done in isolation. It has to be framed in the existing strategies. Ideally, there should be a dedicated cross-border strategy which is based on reliable data for cross-border regions, which is politically supported, and which has undergone a wide consultation with relevant stakeholders. It is a useful exchange forum and a necessary step for sustainable and structural cooperation.

Cross-border accessibility is still a major barrier across most EU borders, while cross-border accessibility is a prerequisite for functioning cross-border regions. In the sparsely populated Aurora region with its long distances, cross-border connectivity is not yet sufficiently

developed. Legal and administrative frameworks from both sides of the borders make the creation of joint solutions for improving mobility across national borders a challenging task. The relevant Border Orientation Papers are pointing out the importance of the improved connectivity, especially east-west connections, and this is still an important theme for the Aurora programme. There is a need for increased cooperation between regional and national authorities in order to achieve an accessible and attractive region.

The Covid-19 pandemic has shown that we are not fully capable of making coherent decisive actions in order to deal with the crisis. The challenges we have been faced with during the Covid-19 pandemic, are reminiscent of each other and therefore it is useful to examine how the collaboration could be further deepened.

Through the experiences from the previous programs, it has been proved challenging to make real changes in the cross-border cooperation, for instance, concerning the labour market and health issues. This is largely due to administrative and legal obstacles and lack of common understanding. Previous programme and stakeholder analysis have also shown that there is high threshold for each other's educational systems. We are still not fully accepting each other's curriculum and certificates (for example for the vocational education) which is one of the fundamentals for the common labour market.

In order to have good public policies, these should be based on evidence (data, statistics, studies, mapping). While the data and statistic are generally available at national level, it is not always the case at regional/local level and even less at cross-border local level. In addition, the regional data available is seldom uniform and comparable between the cross-border regions. Harmonising data across borders is necessary for a well-functioning society in the broadest sense of that term. It can also be crucial for understanding the impact of stopping mobility and cross-border commuting. At present, we do not even have reliable statistics on border commuting.

According to the socio-economic analyses, the structure of the institutional capacity in the programme area is varied. Due the long distances, lack of critical mass, aging population etc. is the cross-border cooperation the key element to strengthen the institutional capacity in the area. During the stakeholder hearings of the programme have the public organisations (e.g., universities and municipalities) addressed their interest and ambitions to deepener their cross-border collaboration. Good and efficient catalysts are there the cross- border entities/committees of the Aurora region. Those organisations have a valuable knowledge of cross-border impediments and ideas for further development steps for better cross-border governance.

Sápmi

The Sámi people have made significant efforts to maintain and strengthen their self-governance and bonds across the national boundaries and to advance their interests as one people, such as the establishment of the Sámi Parliaments and through the development of cross-border institutions and initiatives such as the Sámi Parliamentary Council (SPC), a cooperative body for the Sámi Parliaments of Finland, Sweden and Norway, and the Saami Council, a non-

governmental organization that promotes the interests and human rights of the Sámi people across borders.

Despite these initiatives, the Sámi Parliaments are mainly advisory bodies with limited autonomy and decision-making power, albeit the political weight of the Sámi Parliaments varies between the three countries. The limited resources of Sámi organizations are a significant obstacle to increase involvement in different political, economic, and administrative processes at all levels. Furthermore, there are differences between the countries which might limit cross-border cooperation even in the traditional cooperation fields. Ongoing barriers such as administrative and legal obstacles persist in the cross-border cooperation between Finland, Norway and Sweden on the matters affecting Sámi, i.e., with traditional livelihoods, education, and social and health care services. There is also no sufficient data about Sámi well-being or fulfilment of rights and there is a lack of statistics on the educational level of the Sámi population.

1.3 Lessons learnt

According to the evaluation of the Nord-programme (Kontigo 2018) there is a good balance in the project portfolio between innovative projects, driven by small and creative actors and projects with larger, more experienced actors and cluster initiatives. The projects in the programme have had a clear and active cross-border perspective with partners working with common goals and joint communication.

The Botnia-Atlantica programme has generated results in line with the ambitions that were set in the programme document. On a general level the results are above all development of methods, increased knowledge, and cross-border networks, which is one important contribution from the programme according to the evaluation of the programme (Oxford 2020). One conclusion from the evaluation was that projects that were clearly defined thematically, geographically and/or has clearly defined their target-groups, more easily reached their goals.

The sub-area Sápmi, a part of the former Nord-programme, holds the only indigenous people of the European Union, the Sami people. Interreg has made an important contribution to developing structured cooperation between the Sami populations and strengthened the cross-border Sami community. Through the programme the Sami actors have got opportunities to solve their common challenges for example by enhancing the visibility of the Sami languages, cultural heritage and traditional knowledge as well as developing joint educational initiatives for the needs of Sami industries.

The implementation of the two former programmes has achieved successful results and the quality of projects has been on a high level. The structure of the programmes has been able to predict the most important development areas for the regions.

1.4 Implementing EU strategies

The Interreg Aurora Program 2021-2027 has an important function in linking the Green deal

strategy with national plans and the regional and local development plans in northern Sweden, Finland, and Norway. The Interreg Aurora Programme also has a number of potential areas for cooperation that can be linked to the EU's macro - regional strategy for the Baltic Sea Region and strategies for the Arctic region. Part of the Interreg Aurora Programme covers the Arctic, an area that offers both challenges and opportunities that may affect the lives of European citizens in future generations. With these challenges and opportunities also comes a responsibility where the EU wants to contribute responsibly through its funding programs.

Through the Interreg Aurora Programme, the EU can, among other things, promote the sustainable development of the region's environment, natural and cultural heritage and contribute to a good living environment for residents in the region. The programme will implement the revised Action Plan of the EU strategy for Baltic Sea region (EUSBSR). Actions in the Interreg Aurora programme are often cross-sectoral and their scope can serve several EUSBS objectives, sub-objectives and policy actions.

1.5 Arctic cooperation

The contribution of EU programmes to the goals of the EU integrated policy on the Arctic builds on the Joint communication on the EU Arctic Policy (2016) that sets out mechanisms for enhancing the collaboration and coordination between different programmes. One concrete mechanism is a network of managing authorities and stakeholders of the regional development programmes in the Arctic, the network has been coordinated by the Northern Periphery and Arctic-programme.

Both Interreg Botnia-Atlantica and Interreg Nord have been active in the network during the past programme period and Interreg Aurora will continue with the cooperation even in the next programme period. The success of the Arctic network is dependent on the active involvement by all the programmes working in the Arctic.

The cooperation has so far facilitated exchange of information, joint and coordinated programme events and representation at larger Arctic and European conferences. Another positive example of the cooperation has been the yearly Arctic Award -project competition, an important and positive way of enhancing visibility and awareness of the cross-border cooperation in the Arctic and sub-Arctic.

1.6 Horizontal principles

Sustainable development will be taken into account as a horizontal principle in all Programme implementation. Sustainable development will be included in programming at all stages. The objective is to ensure that all Programme activities are socially, ecologically, culturally, and economically sustainable. The impact on the environment, climate and human wellbeing should be positive. Projects will also be reviewed from the viewpoint of risks regarding climate change. Climate change mitigation and adaptation is important to prevent negative impacts on the ecosystems.

Before being approved for support from the programme, all project applications will be assessed against criteria and procedures which are non-discriminatory and transparent, ensure accessibility to persons with disabilities, gender equality and take account of the Charter of Fundamental Rights of the European Union and the principle of sustainable development and of the Union policy on the environment. The objectives of the programme shall be pursued in line with the objective of promoting sustainable development as set out in Article 11 TFEU, taking into account the UN Sustainable Development Goals, the Paris Climate Agreement and the "do no significant harm" principle.

All projects should therefore strive for a performance with low carbon footprint, with equal opportunities for men and women and inclusion of underrepresented groups, including indigenous peoples and other culturally and linguistically distinct groups originating from the programme area.

Contribution to the horizontal principles is foreseen as an assessment criterion and the information provided by the projects in the applications for funding is assessed. Projects with a negative impact on sustainable development, equal opportunities, anti-discrimination, and gender equality will not be funded.

1.7 Justification for the selection of policy objectives and the Interreg specific objectives, corresponding priorities, specific objectives, and the forms of support, addressing, where appropriate, missing links in cross-border infrastructure

Table 1

Selected policy objective or selected Interreg-specific objective	Selected specific objective	Priority	Justification for selection
Policy objective 1. A smarter Europe by promoting innovative and smart economic transformation	Enhancing research and innovation capacities and the uptake of advanced technologies	1	<p>The R&D expenditure and share is lower than e.g., in the metropolitan regions of Finland, Sweden, and Norway. It is important to strengthen the development around R&D, but also important that SME invests more in R&D.</p> <p>The industry structure in the Interreg Aurora programme area is a combination of sustainable utilization of natural resources and initiatives to promote advanced technology. This is an important field to develop in order to succeed in a</p>

			<p>transition to a green and sustainable economy.</p> <p>The Sámi area has a low percentage of private businesses. Traditional Sámi industries like reindeer herding is important in some core Sámi municipalities. There is there for a need for a more diversified business structure in Sápmi. The programme should priority activities to develop Sámi businesses through R&D and strengthening the entrepreneurship in Sápmi. Sami businesses have a need for development so they can reach bigger markets Target group in the programme must also include micro businesses.</p>
<p>Policy objective 1. A smarter Europe by promoting innovative and smart economic transformation</p>	<p>Enhancing growth and competitiveness of SMEs</p>	2	<p>Micro, small and medium-sized enterprises in different industries have different needs when it comes to internationalisation and exportation. It's therefore very important that public sector export-supporting organisations are able to help businesses, and are available, regardless of where in the region the businesses have their operations.</p> <p>The region's trade and industry consist largely of small enterprises, even so-called micro-enterprises with fewer than ten employees. To improve their competitiveness in the market, they need collaboration to gain access to know-how and other resources that they themselves lack</p> <p>The Sámi Area is in need of a more diversified competence and business structure to provide jobs for the young Sámi population.</p>
<p>Policy objective 2. A greener, low-carbon Europe by promoting clean and fair energy transition, green and blue investment,</p>	<p>Promoting climate change adaptation and disaster risk prevention, resilience, taking into account ecosystem based approaches</p>	3	<p>Climate change doesn't know borders. The Green transition and sustainable use of natural resources and adaptation to a different climate are highly prioritized in the program area and since the area is partly very industrial it has significant effect on the programme area.</p> <p>To prevent and adapt to issues like the impact of climate change on e.g., biodiversity, traditional livelihoods, the risk of increased incidence of fires and extreme weather conditions and coherent risks, need broad partnerships and</p>

<p>the circular economy, climate adaptation and risk prevention and management</p>			<p>benefit from cross-border cooperation and collaboration.</p>
<p>Policy objective 2. A greener, low-carbon Europe by promoting clean and fair energy transition, green and blue investment, the circular economy, climate adaptation and risk prevention and management</p>	<p>Enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution</p>	<p>4</p>	<p>There is a large number of designated areas of protection, including several important trans-border natural areas and connected cross-border ecosystems in the region. However, most of the area is not protected by law or voluntary provisions.</p> <p>There are multiple rivers and water courses that ultimately (in almost all cases) flow into either the Baltic Sea via the Gulf of Bothnia or, in fewer cases, into the Barents and Norwegian Seas, and thus are of key importance to the quality of the surrounding seas.</p> <p>Around the Baltic Sea in the programme area and in the border region between Norway and Finland, the rivers have a high recreational benefit for the sport fishing and for the tourism industry, because of the unregulated rivers without hydropower plants.</p> <p>Changes in vegetation and the presence of invasive species can lead to unforeseen changes in the behaviour and movement patterns of animals this in turn can have effects on e.g., agriculture and forestry, as well as outdoor life and tourism industry.</p>
<p>Policy objective 2. A greener, low-carbon Europe by promoting clean and fair energy</p>	<p>Promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy</p>	<p>5</p>	<p>Measures to reduce the carbon dioxide emissions from urban mobility and transports are needed in order to reduce the Aurora regions carbon footprint, since mobility and transports are one of the main sources of CO2 emissions.</p> <p>The Aurora region needs to invest in the development and testing of technologies and</p>

<p>transition, green and blue investment, the circular economy, climate adaptation and risk prevention and management</p>			<p>plans that, through multimodality, contribute to reducing carbon dioxide and nitrogen dioxide emissions in the region and primarily in the urban environments that exist. This needs to be done jointly in the area because competence and resources need to be coordinated but also because the emissions do not stop regionally and because there are common urban environments.</p> <p>There are not enough urban areas in the Aurora regions to function separately, cooperation is needed in order to ensure a well-functioning region. There are also vast sections of hinterland that need to be reachable. The much-needed technological solutions for a greener transport system requires networking, knowledge exchange and cross-border cooperation in order to solve the problems that are unique for our Arctic region.</p>
<p>Policy objective 4.A more social Europe implementing the European Pillar of Social Rights</p>	<p>Improving equal access to inclusive and quality services in education, training, and lifelong learning through developing accessible infrastructure, including by fostering resilience for distance and on-line education and training</p>	<p>6</p>	<p>The Programme area is likely to experience an overall population decrease – but also the population is ageing. There is a large need of an increased and educated workforce and entrepreneurial mindset in the region. High dropout rates, high number of people with “basic” education level, long distances to high schools and universities in the region, outmigration are some of the challenges the regions are facing. Joint development of an attractive and high-quality education area and joint education is cost effective and can attract people to come, return and stay.</p> <p>Labour market participation in the programme area is somewhat lower compared to the country average. Unemployment rate in the programme area is on par with countries as a whole.</p> <p>The demographic development in the Sámi area follows the same pattern as other rural areas in the north.</p> <p>The Sámi area is in need of a more diversified competence and business structure to provide jobs, especially for the young</p>

			<p>Sámi population.</p> <p>Sápmi – transferring the knowledge within Sami businesses and livelihood which is linked to the traditional Sami livelihood. The central part in this transformation is also the Sami languages and the interaction with nature. The need for knowledge and training in different fields is similar for all the countries in Sápmi.</p>
<p>Policy objective 4. A more social Europe implementing the European Pillar of Social Rights</p>	<p>Enhancing the role of culture and sustainable tourism in economic development, social inclusion, and social innovation</p>	7	<p>Aurora programme area is characterized as a multi-ethnic and multicultural melting pot. The Sámi culture and languages are an important part of this heritage that needs to be sustained and developed for a functional area. The area has a rich and unique natural and cultural heritage. Traditional livelihoods and [traditional] utilisation of the nature is integral part of cultural values, and loss of traditional knowledge are seen as prominent.</p> <p>The new geography of the programme area brings new possibilities for cultural heritage cooperation. Due to vast distances and lacking precedence collaboration across borders needs to be enhanced and broadened.</p> <p>The dramatic turndown of international tourism caused by the covid-19 pandemics puts new challenges to tourism, where it's about recovery, stabilisation, and adjustment for a new reality. Programme area provide for developing cross-border sustainable tourism concepts while at the same time respecting and promoting cultural heritage and involving and engaging local stakeholders and citizens.</p>
<p>Interreg Specific Objective (ISO) 1 – Better Cooperation Governance</p>	<p>Other actions to support better cooperation governance</p>	8	<p>The region for the Aurora program is new and large, which is composed of two former Interreg program areas and the region has to be found common fundamentals for cooperation. To build a common understanding and shared strategies are important basic elements for the further sustainable development in the region. Increased trust and capacity building in the region are also crucial essentials for the good collaboration, as well as the alleviation of the cross- border</p>

			<p>obstacles.</p> <p>There is a need to strengthen Sámi institutions and to build their capacity and a need for activities to strengthen Sápmi governing institutions and tackle obstacles which hindering cross-border cooperation in Sápmi.</p> <p>Based on the socio-economic analyses, feedback from the stakeholders, through the public events and publications during the programming, as well, based on previous experiences, Interreg Aurora have been got broad signals of many issues according to the ISO 1.</p> <p>All relevant specific objectives are equally relevant for building common fundamentals for cooperation in the new Aurora program region, which are also defined by SO 6.</p>
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2. Programme Priorities

2.1 Smart specialization – sustainable technology and business development through research and innovation

2.1.1 Specific objective

Enhancing research and innovation capacities and the uptake of advanced technologies

2.1.2 Interventions of the Funds

Research and innovation activities in small and medium-sized enterprises, including networking

The programme's ambition is to promote sustainable economic growth based on applied research, innovation, technology transfer and business development to an environment that is greener and more resource efficient through the use digitalisation and green transition.

Our business structure consists largely of SMEs and micro-enterprises with limited financial and personal resources when it comes to further developing through digitalization and innovation. Strengthening company clusters including micro-enterprises by cross-sectoral networking and integrating *value chains* is important. At the same time to develop the region, one is dependent on using a larger part of the natural resources found here. A greater degree of further processing in the region is important for creating a resilient and competitive business community through research and innovation. In particular, our region has an advantage in natural based resource economy e.g., the green and blue economy. By coordinating efforts at regional and cross-border level, one can create a *critical mass* on access to e.g., raw materials, but also knowledge networks.

Interreg Aurora will promote cooperation between enterprises based on complementary strengths through exploring how to boost innovation by promoting new partnerships, across the wider programme area. Smart specialisation is an innovative approach that aims to boost growth and jobs in Europe, by enabling each region to identify and develop its own competitive advantages. Through its partnership and bottom-up approach, smart specialisation brings together local authorities, academia, business spheres and the civil society, working for the implementation of long-term growth strategies supported by EU funds. The programme's region needs to build a critical mass to foster the potential for sustainable growth by focusing on cooperation in innovation on core areas of comparative advantages in line with e.g., the *regional smart specialisation strategies*.

Digitalisation, new technologies and green transition give rise to an urgent need for new knowledge in SMEs and thus for more cooperation and knowledge transfer between businesses, higher education, research institutes. The programme's activities should facilitate so that higher education, research institutes and businesses can develop innovative driven projects. The level of commercialisation of R&D actions is a challenge in the programme area. There is a need to strengthen business-driven R&D actions and applied research, which seeks to enhance the development of SMEs.

Civil society also plays an important role in *open innovation*. A strong, engaged, and

functional civil society is an important prerequisite for the ability to meet strategic challenges. Civil society gives a voice to different groups of people, supplies various services to members and society, and is an innovator of pioneering solutions to societal and organisational challenges.

Sápmi

The Sami businesses consist most of SMEs and micro businesses, this limits the possibilities for the businesses to conduct or participate in research and innovation projects. The Sami research institutions are small with limited resources and capacity but with great competence on Sami society, businesses, languages, environmental science, and Sami handcraft. Different national universities conduct research on Sami issues. To develop the research and innovation in the Sami businesses, there is a need for research and business networking between the Sami's, building the structures for research and innovation in Sami businesses and promoting cooperation.

Research and innovation activities in public research centres, higher education and centres of competence including networking (industrial research, experimental development, feasibility studies)

There are high-level universities, research institutes and other knowledge institutions in the programme area. The cooperation between universities in Norway, Sweden and Finland is particularly important. The ripple effects are great, not only for education and access to a competent workforce, but also for research, development, value creation and innovation. Activities should enhance cross-border cooperation based on strengths, needs and complementarities in R&D and education using the regional specialisation strategies as a point of departure.

There is a great need for cross-border collaboration within Research and Innovation (R&I) in our region to establish a joint regional R&I system in which the institutions have complementary competence and knowledge. These institutions are individually small in an international context, where they have to compete with large European research and innovation communities for research funding. Interreg Aurora will stimulate to create a critical mass in the region that can reach out to programmes such as Horizon Europe. Through projects funded from Interreg Aurora, the partners can build institutional capacity, trust and a structure that enables them to invest in major research projects internationally.

The vast programme area represents regions with unique challenges, but also regions that are similar with the same challenges in some industries. There is a need in the regions to develop these industries through strategic cooperation. The programme area has great opportunities to contribute within renewable energy technology and system solutions, bioeconomy, metals, and minerals that are important for implementing the green transition.

For instance, the programme area is of great importance for supplying EU with raw materials, metals, and minerals. The programme area is of crucial importance for future mineral utilisation. However, the challenges are also great for this industry in terms of environment, nature, Sami interests, acceptance in local communities and access to capital. A strategic cooperation will point to opportunities and challenges so that that there can be achieved a common understanding and goals for the development of this industry. This type of

cooperation will have a great impact on the respective national authorities, sustainable and process industry, and renewable energy production. The programme should stimulate to develop a strong value chains from raw materials to finished products in our programme area, e.g., utilising minerals in battery industry. The Interreg Aurora programme should promote this type of strategic cooperation to develop the value chain in e.g. renewable energy technology and system solutions, bioeconomy etc.

Data is important for value creation and the development of new services, products, processes, and business models. This regards not only ICT and software industry, but also for example health and well-being, renewable energy production, construction, food production and automation as well as new emerging industries in the interfaces of sectors. Research and innovation projects seeking to strengthen data driven development in the program area are encouraged. Activities may for example focus on themes such as IoT, satellite and positioning data, connectivity, data analytics, robotics, artificial intelligence, cybersecurity, and safe utilisation of data.

Sápmi

In Sápmi Interreg Aurora should support activities to contribute to the establishment of a local innovation network at the intersection between business and academia, between science and traditional knowledge, and between tradition and the present. The goal is, among other things, to create economic development for reindeer husbandry and coastal industries, new business opportunities, increased knowledge about indigenous peoples. Strengthening innovation in Sápmi is needed to build competitiveness and good knowledge centres in Sápmi.

Technology transfer and cooperation between enterprises, research centres and higher education sector

In order to speed up the process leading to new products and services being introduced on the market, the development cycles need to be enhanced through facilitating R&D activities and investments. In addition to high competence, this requires a strong research environment offering testing, verification, and piloting possibilities for both companies and HEIs. Access to international networks and cooperation with state-of-the-art research and innovation environments is crucial for sustainable growth of the regional economy.

Technology development provides new opportunities for competitiveness and welfare in the programme area. Digital services and communication technology can to a greater extent offset the disadvantages associated with long distances and contribute to increasing economic activity.

A well-functioning transport and communication infrastructure is a prerequisite for enhancing cross-border cooperation. Businesses in the area have a large import and export dependence and comparatively great distances to their market outlets. To create competitive conditions for the business sector, it is important to focus on finding innovative solutions to problems related to accessibility and the transport efficiency in the program area. Enhancing the coordination of cross-border connections can also contribute to more sustainable and greener transports in the area. There is a need for developing sustainable logistics chains and transport patterns by focusing research on digital solutions and services and low carbon transport technologies.

Example of possible activities:

- Cooperation between institutes, higher education institutes, businesses and/or public sector to create cross-border knowledge networks enhancing green and digital transition
- Research and innovation actions and partnerships building upon strengths that are needed in the region but not to be found within the regional smart specialisation strategies combination
- Usage of shared regional research infrastructures (such as living labs, pilot, and demonstration environments) through cross-border cooperation to enhance the uptake of advanced technologies and the development of innovative products, services, and methods as well as new business models and opportunities
- Cooperation between research institutes, higher education institutes, businesses and/or public sector to strengthen the exploitation of applied research in SMEs and/or public sector
- Development of arenas, programs, tools, and methods for supporting technology transfer, soft knowledge and cooperation between enterprises, research centres and higher education sector
- Stimulate to create a critical mass in the region that can reach out to international programmes such as Horizon Europe

2.1.3 The main target groups

The long distances to major markets, to stimulate and encourage participation by companies, authorities, organizations, universities and research institutes in cross-border innovation systems in the sparsely populated parts of the region, in order to benefit the region's development as a whole. Open, cross-border innovation will help to involve more actors with different resources, gender, and ethnic origin, as well as a stimulating cross-fertilization between ideas from different industries, regions, nations and internationally.

The main target groups for the activities are:

SME, micro enterprises, universities, colleges, polytechnics, and research institutions, as well as the public sector and civil society.

2.2 Enhancing growth and competitiveness of SMEs

2.2.1 Specific objective

Enhancing growth and competitiveness of SMEs

2.2.2 Interventions of the Funds

SME business development and internationalization

The programme area needs to develop a strong and competitive business sector focusing on

sustainable growth. Through increased cross border cooperation, the region's businesses can access knowledge and resources, which in turn will develop their commercial activities and strengthen their positions internationally. The region is experiencing increasing global competition and an accelerating need to adapt, which requires increased competitiveness among the companies in the region.

Focusing on entrepreneurship is important in developing SMEs towards internationalisation and reaching new markets. Through networking, business development and marketing work, an increase in the degree of business collaboration across borders, with the goal of improving joint competitiveness in a global market is important. It will be important to strengthen this type of cross-border cooperation in the next program period.

To be able to compete on an international market, we need to increase the level of commercialisation and venture capital expertise, increasing networking and information transfer to turn our competences into new products and services.

There is a need to increase the level of digitalisation in manufacturing SMEs in different sectors. Actions targeting the uptake and use of new digital technologies related to industry are needed. Likewise, it is important to strengthen the capacity of SMEs to create new ways of operating, evaluate existing production methods and engaging in innovation processes. Finally, increasing the development of new services and business models based on data within manufacturing SMEs is important for improving productivity, economies of scale and level of technology.

Sápmi

The majority of companies in Sami industry are micro- enterprises, in which Sami culture and traditional knowledge forms the basis of the Sami business. Sami businesses could include traditional reindeer herding, hunting, fishing and “duodji” (traditional Sami handicrafts). But there are also new areas of business ranging from product processing, tourism, interpretation to design, music, and media production.

Moreover, the companies are often composed by seasonal combinations of different activities. It is therefore important to collaborate in an organized manner across borders, and based on the function of the businesses, to increase the development of the industry. This result in micro-enterprises attaining increased competence and becoming more competitive, even on international markets.

Innovation cluster support and business networks primarily benefiting SMEs

Building a critical mass is vital for our SMEs and micro-enterprises to be competitive in a global market. Strengthening the cross-sectorial cooperation between SMEs through developing clusters will be a priority area in the programme.

Collaboration in clusters has the purpose of creating good conditions for growth and renewal. There are results that show that businesses that are part of cluster organisations grow faster

than other businesses. For a cluster to be competitive there have to be systems around it that support clusters and collaborate with them. The program particularly encourages cooperation between clusters to build on complementarities. Potential lies in merging specific competencies in different clusters in order to create new knowledge networks and areas of strength in the regions.

The program area is characterised by small home markets for the companies. Moreover, cooperation networks, partnerships and added value created between different companies in the value chain will become more and more important for building competitiveness in the future. Therefore, it is important to increase cooperation between companies in the program area. Actions -targeting at creating critical mass, supporting internationalisation, growth and productivity of the companies, stimulating access to new knowledge networks and business contacts, and increasing the capacity among SMEs to find ways to new international markets are central.

Sápmi

In Sami areas, the tourism industry is contributing to ever greater economic development. Experiences based on traditional Sami culture and way of life have significant attraction value in the tourism market and are in demand by more and more people. Interreg Aurora must stimulate the cooperation between private and public actors working purposefully to develop Sami tourism as a business and value creation. The development of Sami and reindeer husbandry-based tourism must take place with the industry itself as an active premise supplier. Involved actors must ensure a strong awareness that Sami culture is not abused in tourism contexts. The need for establishing branch organization that also work with the traditional Sami businesses before enabling the businesses to establishing clusters.

Example of possible activities:

- B2B cooperation strengthening the uptake and use of technologies and advanced systems related to (e.g., robotics, IoT, open data, cyber security, 3D-printing, data-analytics)
- Knowledge building activities and advice increasing the preparedness of SMEs to internationalize and grow
- Activities linking companies based on complementarity competencies to enhance the innovation capacity and/or the formation of cross-border value chains
- Cross-border cooperation between clusters adding complementary competencies
- Cross-border cooperation between start-up hubs and business accelerators and virtual incubators adding complementary competencies

2.2.3 The main target groups

An important prerequisite for promoting a developed industry in the programme area is to eliminate various border barriers in order to promote cross-border cooperation. A complementary structure is also required on both sides of the border in order to support

business development.

This priority area supports efforts facilitating increased cross border cooperation between industries, sectors, and companies in order to achieve increased competitiveness among the region's SMEs. Also, cross-border initiatives stimulating entrepreneurship, innovation and increased internationalization of companies are supported. Cross-border cooperation, activity, or other measures refers to various actors' cooperation across transnational borders with the aim of developing products, services and methods or other factors that will increase the competitiveness of the region's SMEs.

The main target groups for the activities are:

Public organisations at local, regional, and national levels, universities and colleges, education actors/organisations, business promoting actors, industry, cluster and industry associations and NGOs.

2.3 Climate change adaptation and mitigation, risk management and monitoring

2.3.1 Specific objective

Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system-based approaches

2.3.2 Interventions of the Funds

The increase in climate related disasters in recent years are clear examples of the effects of climate change. To deal with this in the future and to create opportunities to develop sustainable societies throughout the region, knowledge needs to be increased and actions needs to be taken, about which climate effects and adaptation measures are suitable for different sectors in the society.

Through the work done on climate adaptation plans and strategies, there is an opportunity for exchange of experience and find out and work together with a common challenges and solutions, expertise and information on climate change, impacts, adaptation, and resilience. Effective implementation of strategies and plans presupposes that actors gain a greater knowledge of how the climate will be affected and what adaptation measures are needed in a multi-generational perspective.

The use of new technologies and digital tools e.g., drones, virtual and augmented reality sensors, artificial intelligence, big data, and Internet of things, for monitoring and surveillance of the effects of climate change is a great opportunity. Methods for, and testing of, these tools will be important activities.

Including climate change adaptation issues in risk and vulnerability analyses for various activities is a way of creating a picture of the measures that may need to be implemented to manage and prevent risks associated with climate change.

Interventions like cross-border knowledge sharing on methods for adapting e.g., agricultural and forestry practices to an increased frequency of extreme weather conditions. Hence, increasing the resilience and sustainability of the sectors.

With regard to climate-related risks around environmentally dangerous activities and polluted areas, future adaptation work should focus on clarifying risks regarding ongoing and discontinued operations, pollution risks in the event of floods and erosion, and establishing strategies and measures to minimize risks to humans, societies and the environment. New monitoring solutions could also be developed and implemented e.g., to monitor the environmental impact of the different industries.

The climate change will affect urban as well as rural areas in the region. Sharing best practices and developing new methodologies and scenarios for adapting regional and urban spatial planning to e.g., rising water levels, more frequent heavy downpours and droughts will be important.

The region has a lot of different types of protected areas such as national parks, world heritage sites, Natura 2000. Research on how the climate change affects these areas and sites and hence, how the management of them need to adapt, are important activities. Exchanging knowledge and best practices can result in common solutions.

Parts of the region is strongly affected by a long tradition of draining wetlands for natural resource exploitation, e.g., more productive forestry and using peatlands for energy production. Restoration of mires, peatlands and wetlands are tools to increase carbon storage, reduce co-emissions, prevent forest fires, and increase local biodiversity. Restoring also reduces the risk of drought affecting groundwater levels so that drinking water resources are at risk of being polluted or depleted.

All business sectors in the region will be affected by the changing climate. Interventions focused on developing knowledge and methods for adapting to the changing climate while preserving and developing the livelihoods are important.

There is a vast cross-border added value of activities that coordinates strategic rescue services with regards to climate related accidents e.g., landslides, flooding, fires, but also of projects that increases the common knowledge of best practice for handling and preventing of such accidents.

Sápmi

The Sámi society with its culture and livelihood where reindeer husbandry is a key part, is already affected by climate change. The Sámi livelihoods and their conditions for climate adaptation must be understood in a cross-border context and with regard to the combined effects of various influencing factors. One tool for this is climate adaptation plans. Interdisciplinary and cross-border analysis on risks, needs, measures and solutions related to climate change would enhance the effectiveness of plans, strategies, and actions.

In order to adapt to the climate change, an increased flexibility in the management of reindeer herding is needed. This could ensure increased access to and quality of reindeer grazing lands and safe passages for herding (alternative routes due to weak ice in the winter). The climate change results in ice covering grazing lands and tree hanging lichen. The difficulties of finding enough food for the reindeer results in reindeer herding communities having to keep their reindeers fenced in, in order to feed them. This is not in line with traditional reindeer herding methods and increase the risk of disease among the animals as well as having other negative health impacts. Mapping of lichen grazing lands could be one method of reducing the consequences. Common methodologies for field inventory need to be developed. Cross-border cooperation and exchange of experiences and best practices and finding common solutions on winter feeding of reindeers are also important.

An increased cooperation between research and locally based monitoring, to study the effects of climate change e.g., the cumulative effects of climate change in addition to effects caused by competing land use, impacts on cultural landscapes, impacts on Sámi cultural heritage, could result in improved impact assessment methods. Research on climate change related diseases in reindeer may also be of interest.

Use of technologies, digital solutions, and tools e.g., GPS transmitters, GIS-systems, drones, biofuel, internet of things, for Sámi traditional livelihoods could reduce the risks connected to climate change and help reduce negative climate impact and CO2 emission.

To increase synergies and speed up the implementation of the Paris agreement one intervention could be to enhance the involvement and engagement of knowledge holders in policy work, decision making processes.

Promoting and increasing the utilization of árbediehtu (Sámi traditional knowledge) relating to climate change and adaptation through e.g., collecting and documenting traditional knowledge, trainings and workshops to support intergenerational transmission, producing curricula, education, training and information materials, could also be a valuable asset in the adaptation to the effects of the changing climate.

Example of possible activities:

- Awareness raising and communication
- Designing, adapting methods and methodologies
- Experience exchange and learning as result of joint implementation
- Exchange of best practises
- Development of climate adaptation strategies and plans, risk, and vulnerability analyses
- Increased cooperation between research and locally based monitoring
- Implementation of technologies, digital solutions, tools to cope with climate change and reduce climate impact and carbon emission
- Involvement and engagement of stakeholders in policy work, decision making processes (on national and regional level)

- Measures on restoration of e.g., wetlands, peatlands, mires, rivers

2.3.3 The main target groups

Actors in the support system are the primary target group. The purpose is to develop or coordinate system functions, increase the range of services or strengthen stakeholder collaboration. Micro, small and medium-sized enterprises are a secondary target group and is reached mainly when methods and working methods that are developed are permanent or disseminated. The main target groups are public actors, academia and other research and education actors, economic associations, and the civil society.

Particular focus should be placed on ensuring that the efforts contribute to including under-represented groups such as women and people with a foreign background and to reach a broad span of organizations and companies. When designing initiatives, it is important to use a gender equality and diversity perspective, Agenda 2030 and actions safeguarding equality, inclusion, and non-discrimination.

One criterion for prioritizing projects is that they contribute to the implementation of Agenda 2030 and the global goals. A basic requirement is that the projects contribute to the global goals: Gender equality (Goal 5); reduced inequality (Goal 10); Implementation and global partnership (Objective 17).

2.4 Management of nature, wetlands, forestry, fishing etc.

2.4.1 Specific objective

Enhancing protection and preservation of nature, biodiversity, and green infrastructure, including in urban areas, and reducing all forms of pollution

2.4.2 Interventions of the Funds

In order to preserve the region's valuable natural resources for future generations, efforts are needed that raise awareness about the sensitive Arctic nature and increase understanding of biodiversity and ecosystems. The region's unique and varied nature, its biotopes and species, are a joint responsibility, and a joint cross-border commitment for protection, preservation and restoration of human interference is required. Key efforts include fighting pollution of water and air, protecting and enhancing biodiversity and remedying the effects of climate change.

Healthy ecosystems provide our region with a variety of valuable, economically important goods and ecosystem services such as clean water and air, carbon storage, recreation, food etc., as well as being a major pull factor for the tourism industry. It is also crucial for the wellbeing for inhabitants in the region. The functioning ecosystems also play a central role in fighting climate change impacts by protecting against floods and other environmental disasters. A strong and resilient nature is also the basis for Sami livelihood, culture and for business development.

The climate change is affecting movement patterns and habitats of different animals. Hence, the behaviour of those animals and the risk of conflicts with people and economic interests increase. The disruption of natural food chains might cause unexpected behaviour in predators and other animals. Exchange of best practice are important to find effective management methods.

Cross-border cooperation within nature management need to be strengthened as joint preparedness is a prerequisite for reducing the vulnerability of existing ecosystems and dealing with future environmental challenges. Species management (including predators, invasive species, and mobile natural resources), cooperation between nature reserves, cooperation between world heritages etc. are important themes for cross-border activities.

By promoting restoration of key habitats and nature types such as wetlands, damage to the ecosystem can be reversed. This is important both from a biodiversity as well as a climate change perspective. Wetland and peatland restoration have the added benefit of being an efficient practice for carbon sequestration. Actions include developing methods for evaluating which wetlands, peatlands and habitats are suitable for restoration, guidelines for different kinds of restoration efforts, methods for natural carbon sequestration, change of knowledge and best practice etc.

Nature management such as the use and conservation of natural resources and protection of species can cause friction with inhabitants and landowners. When planning biodiversity conservation or restoration efforts, important livelihoods such as forestry, agriculture and reindeer herding need to be taken into consideration in order to reduce the risk for potential conflicts. Information, participation processes and efforts for raising awareness are important tools for preventing conflicts.

Water management in the Bothnian Bay, rivers and lakes is a common cross-border concern that requires a joint commitment. Pollution from mining, agriculture, leakage from acidic soils etc. is contributing negative factors. The biodiversity of the water areas is an important cross-border theme, which also effects tourism, fishing, and agriculture. Waterways connected to the big rivers are important when it comes to reducing leakage into the rivers and sea. Water management is also important from a Sami perspective. Through cross-border collaboration, increased capacity water management can be achieved, including knowledge building, inventory, planning and method development and restoration efforts.

Green infrastructure, based on the protection, conservation, and restoration of nature, is a tool for achieving positive ecological, economic, and social effects. Developing green infrastructure is one approach for responding to challenges such as reducing the ecological and carbon footprint, introducing measures for carbon sequestration, improving human health and well-being, and adapting to climate change. Spatial planning for green infrastructure in both urban and rural areas is a potential theme for cross-border cooperation theme, including cross-border exchanges and harmonization of working methods.

Sápmi

For the traditional Sámi way of life, which is entirely dependent on a harmonious relationship with nature, functioning ecosystems and a strong biodiversity are crucial. Adaptive ecosystem-based management of natural resources, habitats, and species in cooperation with the Sámi communities and knowledge holders contribute to a sustainable and inclusive approach.

A functioning green infrastructure is the prerequisite for reindeer husbandry, nature, and Sámi culture. Reindeer husbandry is key to maintain and increase the biodiversity in the mountainous and boreal areas. For example, mountainous birch forest grazed by reindeer are brighter and less dense which support the diversity of herbs and other species. Working actively with green infrastructure can contribute to long-term sustainable landscapes and reverse the negative trend of declining biodiversity.

Raised awareness about and use of Sámi traditional knowledge and livelihoods as well as participation and involvement of Sámi knowledge holders in decision making and nature management can contribute to an increased understanding and appreciation of nature and its valuable resources. Actions include establishing and management of green infrastructure such as passages and wildlife fences, restoration of wetlands and grazing lands, conservation strategies, development of inclusive methods and processes, guidelines, documentation etc.

Example of possible activities:

- Awareness raising and information
- Data collection, surveys, inventory
- Analysis, scenarios, plans
- Designing and adapting methods
- Joint plans and strategies
- Knowledge and best practice building and exchange, joint implementation
- Harmonization of working methods, guidelines
- Development of joint sustainable management strategies
- Restoration, conservation and increased connectivity
- Methods for including stakeholders with traditional knowledge in nature management and decision making

2.4.3 The main target groups

Actors in the support system are the primary target group. The purpose is to develop or coordinate system functions, increase the range of services or strengthen stakeholder collaboration. Micro, small and medium-sized enterprises are a secondary target group and is reached mainly when methods and working methods that are developed are permanent or disseminated. The main target groups are public actors, academia and other research and

education actors, economic associations, and the civil society.

Particular focus should be placed on ensuring that the efforts contribute to including under-represented groups such as women and people with a foreign background and to reach a broad span of organizations and companies. When designing initiatives, it is important to use a gender equality and diversity perspective, Agenda 2030 and actions safeguarding equality, inclusion, and non-discrimination.

One criterion for prioritizing projects is that they contribute to the implementation of Agenda 2030 and the global goals. A basic requirement is that the projects contribute to the global goals: Gender equality (Goal 5); reduced inequality (Goal 10); Implementation and global partnership (Objective 17).

2.5 Multi-modality, reducing CO2 footprint and harmonization of the transport system

2.5.1 Specific objective

Promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy

2.5.2 Interventions of the Funds

Measures to reduce the carbon dioxide emissions from mobility and transports are needed in order to reduce the Aurora region's carbon footprint, since mobility and transports are one of the main sources of CO2 emissions. In the Aurora region it is important to protect the fragile environment by moving towards making the mobility and logistics systems greener and more sustainable.

The Aurora region needs to invest in the development and testing of technologies and plans that, through multimodality, contribute to reducing carbon dioxide emissions in the region and primarily in the urban environments that exist. This needs to be done jointly in the area because competence and resources need to be coordinated but also because the emissions do not stop regionally and because there are connected urban environments such as e.g., Haparanda-Tornio, Mo i Rana-Umeå-Vaasa, Kiruna-Narvik and Skellefteå-Oulu.

In the sparsely populated, cold climate Aurora region, there is a need to use resources, (financial as well as know-how,) efficiently. We have scarce resources in human and economic capital and there aren't many urban nodes in the area.

Nevertheless, most of the travel and transport in the area is within urban areas or between the rural hinterland and cities. Hence, it's important to develop the region's transportation system towards multi-modality and climate neutrality.

Mobility is not only about transportation between different geographic points. It's also a question of attractivity and competitiveness for the region. Mobility is a question of equal access to education, culture, employment etc. Hence, a well-functioning system for multi-modality means an ability to participate in society and to have a functioning region. These are important issues and actors in the whole region need to cooperate on planning and developing solutions that ensure that the inhabitants of the Aurora region have the same opportunity to take part in the society as people in the more densely populated areas of Europe.

Urban mobility is closely related to other EU policies such as energy, climate change, air quality, economy, social equity and accessibility, innovation, IT deployment and smart cities. Large scale investments in infrastructure, in access to alternative fuels such as e.g., hydrogen and biogas, could greatly benefit from a cross-border coordinated piloting approach in order to achieve maximum use and efficiency.

There is a need for testing and verifying green multi-modal solutions. Moving transports from road to rail and sea is important in order to reduce carbon footprint in the region, e.g., in its more urban parts. The Arctic as a test-field can provide green solutions that are important for not only the circumpolar area, but also other sparsely populated areas around Europe. This also include developing of sustainable and carbon-neutral supply chains of primary resources.

Business actors in the Aurora region have long distances to both suppliers and the markets. In order to increase competitiveness and continue to create growth in the region, businesses must be able to solve their logistics needs in a cost-effective and climate-friendly way. In order to achieve this goal, cross-border cooperation regarding the development of new multi-modal solutions for goods and passenger traffic are a necessity, especially to promote less carbon intense transports in urban areas and hinterlands.

Urban mobility is closely related to other EU policies such as energy, climate change, air quality, economy, social equity and accessibility, innovation, IT deployment and smart cities. Clean mobility solutions require a close link between the transport and energy sectors. It also includes autonomous mobility, energy storage and smart grids. Large scale investments in access to alternative fuels such as e.g., hydrogen and biogas, could greatly benefit from a cross-border coordinated piloting approach in order to achieve maximum use and efficiency. The transport system needs to be harmonized in order to ensure a smooth flow of goods and passengers, which is key for maintaining and increasing the region's attractiveness.

Interventions that expand the use of digital tools and solutions e.g., data analysis, scenarios, intelligent transport monitoring, in order to minimize time, cost and emissions in the transport chain is important. Carbon-neutral transport solutions, which work in cold climate developed in the Aurora region will probably also sustain other harsh circumstances. Efficient digital solutions are needed in order to ensure obstacle free and streamlined movement.

Feasibility studies, optimization, best practice and knowledge exchange on carbon dioxide reducing methods and technologies are necessary for speeding up the green transition. The transition from diesel and gasoline to bio-, hydrogen-, hybrid- and electric- powered

vehicles will reduce the in-use emissions of a single vehicle during operation. However, there is also a significant impact on the environment of how effectively the vehicle is controlled or operated during its life cycle. Semi-autonomous and fully autonomous vehicles increase the proper use of vehicles, taking into account the possible rebound effect of autonomous vehicles i.e., increased traffic. In a region with an ageing population, the need for well-functioning public transport and innovative solutions such as autonomous vehicles are important for a functioning society. The aspect of adding to a functioning society also includes a younger generation of inhabitants that don't necessarily want to own a car and therefore are in need of well-functioning public transports, shared autonomous vehicles etc. New green technologies need to be implemented in the whole region, in order to get better results with regards to the climate.

Cross-border cooperation is needed in order to have access to the needed resources for developing efficient solutions and in order to speed up the green transition. Done in every region by itself it would be ineffective, since the individual regions are too small and sparsely populated. The much-needed technological solutions for a greener transport system requires networking, knowledge exchange and cross-border cooperation in order to solve the problems that are unique for our Arctic region.

Development and testing of electric aviation, electrifying heavy road transports, smart solutions for fast charging of electric cars etc. has the potential to contribute to the reduction of the carbon footprint in the urban areas as nodes such as airports and transshipment terminals often are located very close to the city centers. So do the development and testing of different types of sustainably produced biofuels e.g., biogas from wastewater or catering waste which, in turn, can contribute to the development of a circular economy. The development and testing of climate efficient solution will be applied in urban centers including hinterland connections in the region. The aim will be to explore different solutions, carry out feasibility studies, pilot actions etc., not actual investments.

Studies and strategic plans for developed access to alternative fuels such as hydrogen, biogas, electricity etc. are a key to developing a more carbon dioxide efficient transport system. Decentralized production of alternative fuels needs to be tested and developed.

Multimodality, including how to move smoothly across the borders by e.g., buses, trains, electric vehicles, is a tool for making travel chains more efficient. Access to sustainable, cross-border, multimodal transports for passengers (tourists as well as inhabitants) are important for the image of the region. It also includes enhancing a dedicated urban cycling infrastructure.

Example of possible activities:

- Awareness raising
- Analysis, simulations and surveys
- Strategy development
- Plans, drawings, and designs
- Coordination of plans

- Planning and implementation of digital solutions and processes
- Small scale pilot actions enabling lower CO2 emissions transport systems
- Experience exchange activities as joint seminars, study visits, surveys and trainings

2.5.3 The main target groups

The purpose is to develop or coordinate system functions, increase the range of services and strengthen stakeholder collaboration. The main target groups are public actors, academia and other research and education actors, economic associations as well as micro, small and medium-sized enterprises.

When designing initiatives, it is important to use a gender equality and diversity perspective, Agenda 2030 and actions safeguarding equality, inclusion, and non-discrimination.

One criterion for prioritizing projects is that they contribute to the implementation of Agenda 2030 and the global goals. A basic requirement is that the projects contribute to the global goals: Gender equality (Goal 5); reduced inequality (Goal 10); Implementation and global partnership (Objective 17).

2.6 Education, training and life-long learning

2.6.1 Specific objective

Improving equal access to inclusive and quality services in education, training, and life-long learning by developing accessible infrastructure, including by fostering resilience for distance and on-line education and training.

2.6.2 Interventions of the Funds

The ambition of the priority is to strengthen the region's skills supply. Activities should enable more cross-border employment opportunities, stimulate efforts to bring more people into work, and improve productivity. To maximise the impact and effectiveness, activities should promote concerted efforts to retrain, attract and retain people to increase the labour and skills supply in the Aurora region. To achieve this the region needs a strong and wide range of educational providers. These actors can effectively contribute to a well-functioning supply of skills and lifelong learning in cross-border networks and alliances, by cooperation in response to SME's and organisations need for skills.

There should be strengthened cross-sectoral collaboration and dialogue between educational providers, micro businesses, SMEs, the public sector, civil society, and educational actors to improve skills supply, online education, lifelong learning, and joint marketing of career opportunities in the region.

A flexible structure enables a broad approach and focus on complete solutions, making the program dynamic. The program is designed to be able to meet changes in the economy and

society without requiring extensive administrative management and program changes. The implementation will take into account the possibility of complementarity and possible synergies with other funds.

To meet the needs for education and training and retraining, accessibility and uptake of education must be encouraged. There is a need to increase the efficiency and flexibility in life-long learning at different phases.

Creating employment and enabling establishment could enhance implementing internal competence development of existing staff, which can lead to a change of profession or career development. This in turn opens up for the recruitment of those who are further away from the labour market, as well as preventing unemployment. In the long run, there is a gradual transfer of staff within the organization or company and the need for new recruitments arises.

Future changes in the labour market will require higher levels of education and valuable digital skills. The Aurora region must develop a diverse and high-quality cross-border education area to attract people – both returnees and new immigrants - to learn, retrain, and live here.

Efforts are needed to create demand-driven commissioned education and training by companies and organizations aggregating their skills needed, for example by cluster formations or other types of collaboration and networks. The training can be carried out by different types of intermediate actors at local and regional level for cross-border purposes.

By promoting the supply of skills in key competencies as well as for basic broad competencies increases the possibility that adjustments and lifelong learning are matched to the region's business structure and labour market. A way of developing the labour market and equipping people in MSMEs and other organizations with new skills or work could be creating capacity among the actors through collaborative projects and skills-enhancing initiatives within the programme.

Collaborative actions can also involve common labour markets, synchronizing or creating common certifications, professional certificates and validation requirements, and collaboration between training providers to reach a larger number of individuals and ensure that the right skills are available. Efforts should promote knowledge of gender equality and inclusion as well as economic and ecological sustainability as important factors for both attractiveness and competitiveness.

Through skills development, the development of educational materials and cross-border cooperation and relationship building, promoters of youth entrepreneurship and business can help drive the transition to a sustainable society. Entrepreneurship and a dynamic approach in order to strengthen entrepreneurial skills should be strengthened through skills development and experience and training exchanges through cross-border and cross-sectoral collaboration.

Supporting actors should ensure that young people are given the conditions to develop their entrepreneurship and get a realist and reality-based perception of what entrepreneurship entails.

Sápmi

From a Sami perspective we need all sorts of education and all kinds of education such as Sami

language, traditional food culture, duodji, interpretation etc. The Sami educational institutions, and other Sami organizations, are important when imparting knowledge and culture as well as developing skills. For further development of the Sami education, it is also important to collaborate with other educational institutions in the Aurora region. A continued dialogue and cooperation between the countries can be established through cross-border training programmes, workshops, exchange of experience and networking. This, in turn, can strengthen indigenous peoples' possibility to influence issues affecting their lives and culture.

Development of the cross-border education, lifelong learning and training within Sami society must be based on traditional knowledge – Arbediehtu - and sustainable development. Interreg Aurora encourage also cross-border cooperation within peer learning in Sami area.

By developing and making Sami accessible and visible, and thereby the positive outcome is created for future generations. At the same time, languages as well as culture are dynamic, changing and follow the times. New arenas for language use are constantly emerging and are necessary for the language to follow into the future. A central part of the cross-border work is joint and strategic efforts to preserve and develop the Sami languages.

Cross-border actions for Sami languages should be broadly varied to cover all Sami languages, ages, and sectors. Experiences have been shown that cross-sectoral actions will give long lasting effects.

Example of possible actions:

- Diversifying, updating or harmonising the different types of training provision and qualifications
- Benchmarking and improving the services and methods of career counselling
- Facilitating platforms for joint learning
- Framework projects, which hold together a number of smaller initiatives
- Efforts in the event of rapid changes in the labor market
- Encourage companies, workers, disadvantaged groups and educational institutions to participate in lifelong learning for key competences and to prevent unemployment.
- Common efforts to attract a diversity of labor at different levels to choose the Aurora region as a place to work, study and live in
- Efforts to promote bilingualism
- Developing new or transforming previous training to virtual format
- Develop skills related to social, economic and ecological sustainability
- Promote cross-border activities to strengthen the entrepreneurial spirit and mindset of the present and potential new entrepreneurs, including social entrepreneurship, especially young people
- Develop education and training supporting entrepreneurship and business skills together with business community

- Promote innovation labs, including e.g. social innovation
- Language nests / baths - knowledge transfer – árbediehtu

2.6.3 The main target groups

Private, public, and civil society organisations linked to and/or providing educational services and/or learning opportunities, which can include: Public actors, academia, research and education actors, micro, small and medium-sized enterprises, economic associations and non-governmental organisations.

Particular focus should be placed on ensuring that the efforts contribute to including underrepresented groups such as women, young and people with a foreign background and disadvantaged group to reach a broad range of organizations and companies.

When designing initiatives, it is important to use a gender equality and diversity perspective.

Secondary target group: policy makers, decision makers, individuals taking part in actions.

2.7 Culture and tourism

2.7.1 Specific objective

Enhancing the role of culture and sustainable tourism in economic development, social inclusion, and social innovations

2.7.2 Interventions of the Funds

The programme's ambition is to strengthen sustainable tourism, culture, and livelihoods in the region through cross-border collaboration and knowledge exchange between the research and educational organisations, society, businesses and third sector.

Companies and organisations in the tourism- and the culture sectors have been severely impacted due the pandemic crisis. Recovery, stabilization, and sustainable change are the most critical issues for the survival of these sectors.

The tourism industry has a potential to be developed by enhancing the quality of tourism and culture. Competence of companies and organisations in sustainable and digital solutions contribute to increased international competitiveness. The region's nature, culture and history provide good opportunities to create high-quality products and experiences.

The Aurora area has a fragile and valuable nature. Nordic nature and the natural phenomena attract various tourist segments to visit the area and the development of the easy access in the nature is still needed. The further development of the tourism has to be made with a concept of the transition to a circular economy through increased resource efficiency and without over-

exploitation of the local ecological environment.

Authentic, cultural, and ecologically sustainable tourism are the unique selling point for the region. Culture and tourism have a mutually beneficial relationship. Tourism provides an important means of valorising culture and creating income which can support and strengthen cultural heritage, cultural production, and creativity. Tourism and culture can make places more attractive as well as increase their competitiveness as locations to live, to visit, to work, and invest in.

The citizens in our community are equally important for the tourism as the place we are selling. Local entrepreneurs together with the whole community have the key position in developing of tourism eco-system. The whole Aurora region needs to broaden its cross-border business structure and investments in cultural, creative and tourism industries to develop diversification. Today's and tomorrow's visitors require bespoke solutions, which are also ecologically accepted and socially integrated.

Collaboration within industries helps to establish and develop cross-border partnerships. Collaboration with other sectors is important to create new holistic business models for all year-round businesses. Programme area hosts several RDI institutions with focus on tourism, culture and business development and they should work closely with the transition within industries.

Aurora region has the potential to attract tourists to several destinations which are situated in different countries. This requires joint cross-border marketing and strengthened cross-border accessibility and mobility solutions.

The region needs to work together to find new cross-border solutions which highlight and utilise the region's rich culture and heritage and ensure that these are passed on to future generations. There is potential for joint efforts to strengthen and preserve cultural assets which, in the long-term, could provide a basis for development and growth.

The actions should be taken to make culture, cultural heritage, and intangible cultural heritage, in the region more visible. Language has the important role in preserving culture and cultural heritage, and thereby the actions should take account the linguistic differences and development. There are also needs for actions for knowledge transfer and to revitalise the intangible cultural heritage. The Interreg Aurora doesn't promote single cultural events, unless in connection to larger piloting actions.

The region needs to broaden its business structure and investments in cultural and creative industries to develop diversification. They show above-average growth and create jobs - particularly for young people - while strengthening social cohesion. In the programme area, there is a possibility to create new joint innovative services and products in cultural and creative industries, and they also play an important role in developing digitalisation and digital innovation. Cultural creative cross-border partnerships and networks strengthen the sector and support export initiatives. Also, by increased collaboration between culture, business, academia, and society the region will be strengthened and provide development and growth.

Sápmi

Interreg Aurora program supporting to safeguard the Sámi language, *árbediehtu*, (knowledge transfer) Sámi culture and Sámi traditional industries. Sami tourism has to be based on authenticity and genuine Sami values. A great growth potential lies of development of Sami products and experiences, for example in Sami food and *duodji*. Using digitalisation and A.I., will make Sami culture more visible and easier access for the users, with respect for environmental aspects.

For the Sami, it is important to strengthen and develop the Sami culture, cultural heritage and Sami languages and also preserve what is unique for the Sami community. To contribute to the strengthening, developing, and progressing on the Sami culture there are needs for documentation and protection of Sami cultural monuments and Sami cultural landscapes, as well as the continuation of traditions and customs.

Based on Sami traditions, new forms of expression have emerged in recent decades, which means that new development opportunities and areas are created for working with and living off in the Sami area.

Example of possible actions:

- Support cross-border collaboration, partnerships, knowledge exchange and joint solution and competence-enhancing initiatives.
- Development of nature-based tourism by enhancing common and cross border accessibility and visibility.
- Support for both public and private organisations to reinforce the resilience of tourism and culture sectors through training, employment support, digitalisation, social innovation, networking and transition to circular business models.
- Support for SMEs, especially micro companies (self-employed), including social enterprises (such as social cooperatives) and social innovation in tourism and culture - development of existing or new tourism and culture businesses.
- Support to diversification of the tourism by investing diverse forms of tourism consequently, contributing to the livelihoods of local and regional communities
- Support RDI collaboration in tourism and culture sector development
- Support for cultural clusters that contribute to the development of creative industries
- Strengthen the development of cultural tourism by making available and / or visible the culture and cultural heritages
- Increase attractiveness for residents, visitors and businesses
- Develop culture and creative industries through refined or new products, methods, services and networks

2.7.3 The main target groups

Public actors, academia and other educational actors, micro, small and medium-sized enterprises, economic associations, civil society, and NGOs. Secondary target group: policy makers, decision makers, individuals taking part in actions. Particular focus should be placed on ensuring that the efforts contribute to including underrepresented groups such as women, youth and people with a foreign background and disadvantaged group to reach a broad range of organizations and companies. When designing initiatives, it is important to use a gender equality and diversity perspective.

2.8 Better cooperation governance

2.8.1 Specific objective

Other actions to support better cooperation governance

2.8.2 Interventions of the Funds

The programme's ambition is to strengthen the local and regional cross border governance and to increase the regional capacity in the program area with mutual trust and minimizing the border obstacles. The programme activities must stimulate to common understanding and mutual agreement for the further development of the Aurora program area.

The Interreg Aurora serve varied EU strategies, especially, the EU strategy for the Baltic Sea region and the Joint communication on the EU Arctic Policy. In addition, there is a need for developing further coherent cross-border regional strategies on the level of functional areas. The strategical documents should be based on reliable data, be politically supported, and have undergone a wide consultation with relevant stakeholders. Those regional strategies and action plans can present common guidelines for further joint development, also during the implementation of the Aurora programme.

Coherent strategies are important for regional development together with our neighbours to increase the regional attractiveness and the critical mass of the area. In addition, the cross-border entities could also facilitate developing shared strategies, as well as procedures and sustained mechanisms for cooperation and alleviation of obstacles.

The key element for the better functionality in the program area is a good east west connectivity. Experiences from previous programs have shown successful results through the various feasibility studies which have led to real investments and actions. There is still need to work further with the coherent planning for better connectivity in the region, it has to be based on reliable data and the competent authorities have to be involved.

Developing the collaboration due the pandemic or another crisis is crucially fundamental for the Aurora region. People who live near the borders, their companies, workplaces, or families in different side of the borders, have to feel safe and trust the governmental and regional collaboration, without compromising their job or family situations during the crisis. To

guarantee coherent governance capacity building, the organisations have to work pro-actively, in case we are facing the next bigger crisis. Measures have to be taken to create a more decisive functional area. People-to-people cooperation, which is designed to initiate and promote grassroots contacts and interaction between people, is an important and successful tool for small actors and small projects within increased trust building in the program area.

Strengthening of the institutional capacity in the region could also be done by clustering between the four different EU programmes within the Arctic Cooperation. Interreg Aurora see the possibility for fostering engagement and capitalisation by doing the common actions together with the beneficiaries within the Arctic Cooperation.

Regional and national bodies must show willingness and make actions to minimize the border obstacles. The already existing cross-border cooperation has to be empowered to achieve a mutual agreement for simplified regulations in the Aurora program area. For example, to achieve a common labour market and a more effective health care system, there is still need to identify legal and administrative obstacles for cooperation and find solutions to minimize those impediments. Additionally, the program has to actively work for a bigger acceptance for each other's curriculums and certificates for the upper secondary schools, vocational and higher education. One of the fundamental steps for creating a common labour market in the region, is to ensure a common approach for skill certificates and recognition of education across borders in the Aurora region.

The Aurora program also stresses the need to identify the areas, where the important cross-border statistic is missing and support projects that would fill the eventual gap. Those actions should be done in cooperation between regional actors and national statistical offices, by supporting regional data portals. It is important that the collection of data and statistics has a long lasting and continuing approach.

Sápmi

There is an ongoing need to increase the Sámi parliaments' autonomy and self-governance authority and enhance the capacity of Sámi institutions and other stakeholders. Moreover, there is a need to enhance and develop formal arrangements to advance the self-determination of an indigenous people across the borders of several States by developing Sámi policies that applies beyond the State framework. More efforts are also necessary to raise awareness among national, regional, and local authorities and society as a whole about the Sámi and about Sámi rights to advance the Sámi culture and prevent hate speech against the Sámi.

Sámi institutions need to have necessary capacity and resources in order to provide important services and functions to the Sámi people. There is need for capacity-building for Sámi institutions that aims at improving the performance of such institutions. Since the Sámi people is one people in four countries, divided by state borders, cross-border perspectives and joint efforts such as joint management strategies and models (for different thematic areas; cultural heritage, nature management) and activities to strengthen pan-Sámi/Sápmi governing institutions such as the Sámi Parliamentary Council are needed.

According to the socio economics analyses there is clearly a lack of institutional capacity of the Sámi on the programme area. There is need for capacity-building that focuses on building awareness and knowledge of the Interreg programme. Moreover, it is necessary to tackle cross-border tax obstacles and there is also a need to increase and enable cross-borders cooperation on Sámi health care and social affairs including child welfare and education.

Possible actions for ISO 1:

- Cross-border strategies that strengthen regional capacity
- Feasibility studies for large regional investments
- Actions plans
- Cross-border governance projects for better regional functionality and enhancing capacity
- Initiatives on identifying and eliminating legal and administrative obstacles and implementing recommendations of these initiatives
- Clustering participation in the within Arctic Cooperation
- Data and statistics related to the regions and Sámi
- Long term statistical solutions
- People to people projects in trust building
- Institutional capacity building

2.8.3 The main target groups

National, regional and local authorities, cross-border entities, public- and non-governmental organizations (NGO), civil society.

3. Action taken to involve the relevant programme partners in the preparation of the Interreg programme and the role of those programme partners in the implementation, monitoring and evaluation

The basic aim of the program is to add cross-border regional value to interregional growth efforts and the implementation of European cohesion policy.

The program will contribute to producing qualitative projects in order to support long-term development in the selected thematic areas. The program will also support collaborative projects between the counties in the different organisations within the program area that contribute to the development of regional areas of strength based on the conditions prevailing in the different parts of the area.

In addition, the program will contribute to promoting initiatives that contribute to increased collaboration with other relevant EU programs as well as initiatives that contribute to increased participation of the business community. Finally, efforts will be made to develop the work of evaluation, feedback of knowledge and learning in the Structural Funds work. To ensure that the program meets these ambitions, a large number of actors, from different levels and sectors, have been involved in the program development. It is also of central importance in the implementation of the program that different perspectives and stakeholders are represented.

During the process of program writing, several meetings and information sessions have been arranged in each country. Representatives of the participating regions have met in connection with working group meetings during the writing process.

The parties have also arranged a large digital conference / hearing on 11 February 2021 with approximately 500 participants from all three countries and from different organizations. The communication about hearings event have been mostly via Interreg Nord/Aurora webpage but also via social media to catch the civil society and non-governmental organisations. The social media have been also been the instrument for the questioner to get broader public opinion about the program. In addition to these occasions, different types of meetings (information, gathering of views and input) have been arranged with different actors from all three countries.

In accordance with the principle of multi-level governance and in accordance with Article 6 of the CPR Regulation, a number of the partners involved in the preparation of the program also have different roles in the implementation, monitoring and evaluation of the program. Several of the actors are also found among the project owners or as co-financiers of the projects.

The Monitoring Committee consists of members from the three participating countries and is represented by both the national and regional / local level, the Sami Parliaments and the business organizations as well as socioeconomic partners. The Monitoring Committee, together with the managing authority, shall ensure the quality and efficiency of the implementation of the program.

In addition to the Monitoring Committee, there is a proposal that two steering committees will be established for the program, one for sub-area Aurora and one for sub-area Sápmi. The steering committees consist of representatives from the regional and local level in the program area. The task of the steering committees is to make priorities of projects and examine them towards the programme's objectives and priorities. In this work, the steering committees will be assisted by the managing authority and the joint secretariat. The joint secretariat will prepare and submit proposals with justifications included as working documents for the steering committee meetings. The formal decisions are made by the managing authority following the steering committees' recommendations.

The composition of local, regional and central authorities together with other relevant organizations in the Monitoring Committee and in the Steering Committees ensures a broad anchoring of the program in the program area and contributes to ensuring support for the program in the region and ensuring partners' participation in implementation, monitoring and evaluation.

In addition to participating in monitoring and steering committees, the partnership also participates in other ways in various evaluation initiatives, such as evaluation groups, environmental councils, surveys of organizations among other things.

4. Indication of support to small-scale projects

Interreg Aurora will support projects of limited financial volume directly within the programme.

The common provisions regulation (CPR) stipulates that where the total cost of an operation does not exceed EUR 200 000, the contribution provided to the beneficiary from the ERDF shall take the form of simplified cost options (SCOs), *taking into account necessary exceptions for state aid regulations*. Interreg Aurora will use the SCOs from the regulation such as the lump sum based on a draft budget as well as the 40% flat rate model for projects with limited financial volume.

When the total cost of a project does not exceed EUR 20 000 per participating country, the project will be defined as “a small-scale project”. *Preferably the Monitoring committee will delegate to the Managing authority to decide about support to small-scale projects*. A small-scale project could be, but will not be limited to, a pre-study or to establish a network for the application of a regular project. It could as well be a small implementing project.