

STRATEGIC ENVIRONMENTAL ASSESSMENT INTERREG AURORA PROGRAMME 2021 - 2027

2021-06-10 – FINAL VERSION



WSP Sverige AB¹

Göran Hallin, Victoria Kalén, Jessica Andersson

¹ WSP Sverige AB and its team in this SEA has a long experience in performing SEA:s, on e.g. municipal physical plans and is thus familiar with the legal requirements concerning SEA:s. Individual team members are also well acquainted with the cross-border-cooperation programmes, and was involved in the SEA process of previous programmes.

CONTENTS

STRATEGIC ENVIRONMENTAL ASSESSMENT INTERREG AURORA PROGRAMME 2021 - 2027

1	INTRODUCTION	4
1.1	FINAL VERSION	4
1.2	BACKGROUND	4
1.3	THE PURPOSE OF THE SEA	4
1.4	THE STRUCTURE OF THIS DOCUMENT	5
2	OUTLINE OF THE PROGRAMME AREA	5
2.1	THE ENVIRONMENT IN THE PROGRAMME AREA	6
3	THE AURORA PROGRAMME – A SHORT DESCRIPTION	10
4	THE SCOPING OF THE SEA	12
4.1	SCOPING OF PROGRAMME CONTENT	12
5	METHODS OF ENVIRONMENTAL ASSESSMENT	13
6	ASSESSMENT OF POSSIBLE PROGRAMME IMPACT ON ENVIRONMENTAL ASPECTS	14
6.1	SPECIFIC OBJECTIVE: ENHANCING RESEARCH AND INNOVATION CAPACITIES AND THE UPTAKE OF ADVANCED TECHNOLOGIES	14
6.2	SPECIFIC OBJECTIVE: ENHANCING GROWTH AND COMPETITIVENESS OF SME:S	14
6.3	SPECIFIC OBJECTIVE: PROMOTING CLIMATE CHANGE ADAPTATION AND DISASTER RISK PREVENTION, RESILIENCE, TAKING INTO ACCOUNT ECO-SYSTEM BASED APPROACHES	15
6.4	SPECIFIC OBJECTIVE: ENHANCING PROTECTION AND PRESERVATION OF NATURE, BIODIVERSITY AND GREEN INFRASTRUCTURE, INCLUDING IN URBAN AREAS, AND REDUCING ALL FORMS OF POLLUTION	15
6.5	SPECIFIC OBJECTIVE: PROMOTING SUSTAINABLE MULTIMODAL URBAN MOBILITY, AS PART OF TRANSITION TO A NET ZERO CARBON ECONOMY	16
6.6	SPECIFIC OBJECTIVE: ENHANCING THE ROLE OF CULTURE AND SUSTAINABLE TOURISM IN ECONOMIC DEVELOPMENT, SOCIAL INCLUSION AND SOCIAL INNOVATION	16
6.7	ASSESSMENT OF PROGRAMME CONTRIBUTION TO AGENDA 2030	17
6.8	ASSESSMENT OF RESOURCE ALLOCATION	18
6.9	ASSESSMENT OF ACTIONS TAKEN TO REDUCE NEGATIVE ENVIRONMENTAL IMPACT, IN E.G. THE PROGRAMMING STAGE AND THROUGH SYSTEMS OF MONITORING	19
6.10	THE IMPACT OF NOT FUNDING THE AURORA PROGRAMME	20
7	NON TECHNICAL SUMMARY AND CONCLUSION	20
8	ATTACHMENTS	24
9	REFERENCES	24

1 INTRODUCTION

1.1 FINAL VERSION

This is the final version of the Strategic Environmental Assessment (SEA) of the Interreg Aurora Programme for 2021 – 2027. The purpose of this report is to summarize and report from the SEA process for the forthcoming Interreg Aurora programme.

This report refers to the draft programme version² presented on June 8th, 2021.

This version builds on two previous SEA documents, the scoping document and a first draft version of the SEA (see separate attachments 1 and 2). Both documents have been subject to public consultation seminars, on February 18th and May 19th respectively. The two previous reports have also been made public via the programme's official web page, with a possibility to submit points of views. Any points of view made and how they have been catered for in the further SEA process is documented in the consultation-notes, which is attached to this report (attachment 3).

1.2 BACKGROUND

The European programmes for territorial cooperation (Interreg) are instruments within the cohesion policy designed to meet any challenges raised by a national border. The programmes are part financed under the European Regional Development Fund (ERDF).

Interreg has been part of EU cohesion policies since 1990. The overall objectives of the interreg programmes are to minimize the negative impact of national boundaries on a sustainable harmonized economic, social and cultural development within the EU as a whole. In 2021 a new programming period will commence; it covers a seven year period until 2027 and thus corresponds with the EU budget programming period.

For the forthcoming Interreg programmes the EU Commission presented a proposed new directive in 2018 (COM(2018) 374 final, 2018/0199(COD)). The cross border programmes shall, according to this proposal, focus more than earlier on institutional cooperation, on removing border-obstacles, and on the development of common cross-border services.

Interreg Aurora (Sweden-Finland-Norway) is one of the cross border programmes covering the Nordics. Interreg Aurora represents a new geography of the Interreg programmes in the Nordics, combining the area of two previous Interreg programmes, the Nord and the Botnia-Atlantica programmes. The geography of the forthcoming Aurora programme is shown in figure 1, below.

1.3 THE PURPOSE OF THE SEA

In accordance with the SEA directive (Directive 2001/42/EC) and the proposed new Interreg directive (COM(2018) 374 final, 2018/0199(COD)) an environmental assessment shall be carried out for the Interreg programmes, with the option of through a screening process deciding whether or not a full a SEA shall be carried out.

The Swedish government, as responsible national authority for the Aurora programme, has appointed Länsstyrelsen i Norrbotten as Managing Authority and has also commissioned Länsstyrelsen to carry out an SEA in accordance with the Swedish Environmental Code, Sect. 6, 3 §. Länsstyrelsen i Norrbottens län has thereafter decided that a full SEA shall be carried out for the SEA Interreg Aurora programme (304-11477-2020)

² FINAL DRAFT TO JPC Interreg Aurora version 4.2

The overall objective of the SEA is to better integrate aspects of the environment and sustainability in the programme.

1.4 THE STRUCTURE OF THIS DOCUMENT

This document is structured as follows:

1. Introduction
2. Outline of the programme area
3. Short description of the programme
4. Scoping of the SEA
5. Methods of the SEA
6. Assessment of environmental impact
7. Summary and conclusion

2 OUTLINE OF THE PROGRAMME AREA

The area included in the proposed Interreg Aurora Programme is very vast. It covers the area included in the previous period covered both by the Nord and the Botnia Atlantica programmes.

Following NUTS III regions are covered by the programme:

Sub-area Aurora

Finland

Lappi/ Lapland

Pohjois-Pohjanmaa/Norra Österbotten

Keski-Pohjanmaa /Mellersta Österbotten

Pohjanmaa/ Österbotten

Etelä-Pohjanmaa/Södra Österbotten

Sweden

Norrbottn

Västerbotten

Västernorrland

Norway

Troms og Finnmark

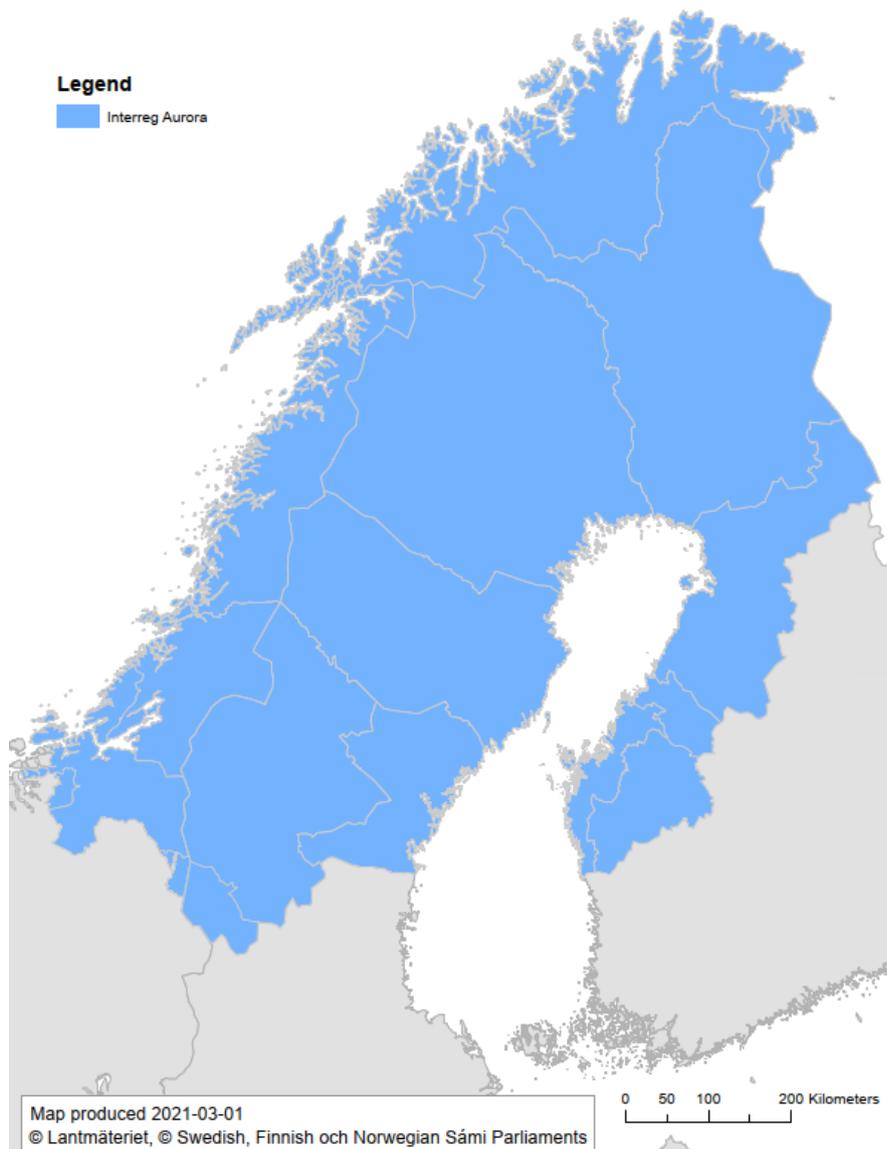
Nordland

Sub-area Sápmi

Lappi/Lapland, Pohjois-Pohjanmaa/Norra Österbotten and Keski-Pohjanmaa/Mellersta Österbotten in Finland. In addition to the official area of the Sámi homeland*, the geographical area of the sub-area Sápmi covers the entire region of Lapland, and the regions of North Ostrobothnia and Central Ostrobothnia. In Sweden Sápmi sub areas covers the whole of Norrbotten, Västerbotten, Västernorrland and Jämtland, as well as Idre Sameby in Dalarna. For Norway the Sápmi sub area covers Troms og Finnmark, Nordland and Trøndelag as well as part of Innlandet (Elgå Reinbeitedistrikt).

*The Sámi homeland means the areas of the municipalities of Enontekiö, Inari and Utsjoki, as well as the area of the reindeer owners association of Lapland in Sodankylä.

Interreg Aurora



Figur 1 Map of the Aurora Programme Area

2.1 THE ENVIRONMENT IN THE PROGRAMME AREA

The SEA shall contain a description of the environmental conditions in the programme area that might be affected by the plan or programme. It shall, furthermore, describe relevant existing environmental conditions related certain natural areas or other areas of specific environmental importance. Below are presented conditions that have been considered to be the most relevant for the programme. The description draws heavily on background descriptions from the proposed programme.

Since the programme area is vast, in comparison to e.g. a municipal plan or a project-plan, a detailed description of environmental conditions is neither relevant nor possible. The main purpose of this section is to give an overview of the variety, richness, uniqueness and sensitivity of the environment in the programme area.

Nature in programme area

The programme area consists of vast forest lands, mountains, long coast-lines, rivers, fjords and archipelagos, all of which are sensitive natural area types with high degrees of biological diversity and species-richness. The low density of population is in this case an important asset.

Large areas are relatively unpopulated and make up what is often described as Europe's largest wilderness. The natural areas in the programme area stands out as an arctic region, meaning a cold climate, polar nights and vast sparsely populated areas. The programme area is also divided by the cultivation-limit, which means that large areas are characterized by limited plant-life.

The eco systems of the programme area are in many instances unique, with many species being confined to the biotopes of the area. Arctic eco systems are unique, and play a vital part for the physical, chemical and biological balance of the planet. Despite an arctic climate there is a wide variety of biotopes and eco systems within the programme area.

In the area's western and northern parts, especially in the two Norwegian fylken of Nordland and Troms og Finnmark as well as in the Swedish mountain ridge, a mountainous landscape is dominating and meets with the Atlantic Ocean, often in deeply cut fjords. The climate along the coast of the North Atlantic and the Barents Sea is often relatively mild providing a much richer flora and nature than further inland.

Further away from the sea coast line a high level plateau is spread from the interior of Swedish Lapland, over Treriksroset, over Norwegian Finnmark and into the northern parts of Finnish Lappi region. Towards the south and the east of this plateau a vast forest landscape begins, covering mainly the Finnish and Swedish parts of the programme area. The forests consist mainly of conifer, mixed with elements of deciduous trees both in the mountain areas and along the coasts. In both Finland and Sweden the forest land is cut across by large river valleys, often holding landscapes formed by cultivation, such as along the Torne älv. Also other parts of the coasts along the Bothnian Sea and Gulf holds flat, often cultivated land.

The areas around the Bothnian Sea and Gulf are also affected by rapid land-uplift from the last glacial period. These areas are known for vast and shallow archipelagos with a species-richness both in the sea and ashore. The programme area's natural areas are also formed by Sapmi cultural heritage, e.g. large areas under active reindeer herding.

Endangered natural areas and habitats

Many of the natural areas in the programme area are significantly affected by climate change, by mining, forestry and industry, and by other human activities.

Many habitat types are under threat, e.g. pasture lands and forests. Moor lands and snow patches in the mountains are under threat by global warming. The forestry affects habitats by trench digging and clearings. The mountain areas are sensitive and at the same time popular areas for recreation and for the tourist industry. Land and plants may be damaged by visitors and by off-road vehicles and bikes, but also when exploited for natural resources, for wind or hydro power or through mining and quarrying. In Norway climate change is expected to lead to a significant raise in sea levels. All over is expected higher average temperatures, increased precipitation during winters and extended periods of drought during summers. Seasons with a stable snow cover are becoming shorter, growing seasons longer and weather more extreme.

Cultural environment and cultural heritage

Eventhough the area is sparsely populated, the traces of human settlements go far back in history, and there is an abundance of areas with rich cultural environments and cultural heritage. The population has always been concentrated to the shores of the sea and Gulf of Bothnia, and the

Norwegian coastline. Here we find the majority of the area's urban areas, including historic town centers. Also, the larger river-valleys were places of early settlements. The rock carvings in Alta (Troms og Finnmark fylke), as part of UNESCO world heritage, is one good example of the region's importance as settlements for humans over long periods of time.

In the inland settlements, Sami populations have a long tradition, including several important centers, both in northern and southern parts of programme area. Sami cultural heritage are traces of Sami people's use of the landscape throughout centuries. They include Sami industries and crafts such as fishery, hunting and reindeer herding. But the Sami cultural landscape also include built environments such as chappels, housing and "churchtowns". Inland areas also have a cultural history of forestry and mining including villages, towns and other settlements.

The programme area also provides examples of how people has moved across the landscape in historic times, sometimes independently of today's national borders. Cultural and language communities often stretch across national borders, as the Sami community is one example of. Other examples are the meänkieli community in Tornedalen or the Swedish language community across Kvarken.

Environmental goals and protected areas

Throughout the programme area measures are taken to protect important natural and cultural areas and to counter the impacts of climate change. Parks, reserves and other forms of protected areas mean that biotopes of great value may receive protected status. Many of these protected areas in the three countries are also within the programme area. In Sweden, e.g., near 85 pc. of the entire area of natural reserves are within the three län of Jämtland, Västerbotten and Norrbotten, where the majority of protected areas are in the mountain regions. The Natura 2000 Network has a strong focus on protecting areas of high natural value and encompasses many habitats in Sweden and Finland. Many of these areas are also under the protection from the EU Bird Directive (Dir. 2009/147) and the Habitat Directive (Dir. 92/43). Norway is not a member of the EU, and thus not in the Natura 2000 or bound by the EU directives mentioned since these directives are not included in the EES-cooperation, but is at the same time the country (of the three in the programme area) with the largest land area under protection (17 pc).

Several areas in the programme area are listed on UNESCO's World Heritage List. Among those listed for high natural value are Lapponia and The High Coast (Sweden), Kvarken Archipelago (between Sweden and Finland) and Vega Island (Norway). Below are examples of further key data for protected areas of high natural values in the three countries.

Sweden

Approx. 14 percent of total land area has some status as protected area.

National parks

The national parks enjoy the strongest protection. In total there are 30 parks in Sweden, of which 8 are in the mountain regions.

Natural reserves

In total there are approximately 5 000 natural reserves in Sweden. They enjoy lower levels of protection, compared with the national parks, but aim at long term preserving natural environment and species within its boundaries. The majority of the protected area are within the mountain regions. Of the total reserve area 85 pc are in the counties of Norrbotten, Västerbotten and Jämtland.

Natura 2000

The Natura 2000 areas aim at improving biological diversity and constitute a network of ecologically sustained areas in Europe. In Sweden there are close to 4000 Natura 2000 areas. Most of them are located in the mountain world, and are also protected by the Bird Directive and the Habitats Directive and involves Animal and plant protection areas, biotope protection areas, national parks and natural reserves.

World Heritage Sites

In Sweden there are 15 so-called World Heritage Sites affiliated on UNESCO:s list. Two of them are natural heritage and are located within the programme area, these are Lapponia and The High Coast. These ones are also considered to have high cultural values with regards to reindeer herding.

Finland

Approx. 10 pc. of the country's land area has some form of area protection.

National parks

Finland has 40 national parks in total. The number of national parks in the north is smaller, but they are instead often large surface sized. Examples of national parks in the programme area are Gulf of Bothnia National Park, Kauhaneva–Pohjankangas National Park.

Natural reserves

There are also 19 natural reserves in Finland. The natural reserves enjoys strong protection and have primarily been set up for scientific purposes and are mainly closed to the public.

Specific Nature Protected Areas and Natura 2000

There are also other nature protected areas in the form of mire reserves of Finland, protected herb-rich forest areas, the seal protection area among others. Altogether, the Nature Protected Areas cover around 12 500 areas³.

Natural Protected Areas, Wilderness Areas and National Recreational Areas are part of the global network of protected areas. Almost all protected areas are included in the Natura 2000-network.

World Heritage sites

Finland holds 7 UNESCO World Heritage sites, 6 are of cultural value and 1 is of natural value. Kvarken Archipelago between Finland and the High Coast in Sweden is one example of a world heritage site of natural value in the programme area and also a cross border one.

Another cross border world heritage site that involves all three countries is Struve Geodetic Arc which consists of a large number of station points (of which several are located in the three countries of the programme area) which the astronomer Friedrich Georg Wilhelm von Struve used for measuring the Earth's meridian and shape in the early 19th century.

³ https://www.stat.fi/tup/suoluk/suoluk_alue_sv.html

Norway

Approx. 17 pc of the country's land surface holds some form of area protection.

National parks

In total there are 47 national parks in Norway, of which one fifth are located in the programme area, e.g. the Varanger Peninsula and Stabbursdalen in the northernmost parts of the area or Lomsdal-Visten in Nordlands fylke.

Landscape protection areas

In total there are 195 Landscape Protection Areas in Norway. Their protection are based on high cultural, ecological or experience grounded values.

Natural reserves

In total there are over 2 400 natural reserves in Norway. The reserves enjoy the strongest level of protection.

World Heritage sites

Norway hosts a total of 8 UNESCO world heritage sites. The Vega island with its archipelago is one example in the programme area.

Norway is not part of the Nautra 2000 network.

3 THE AURORA PROGRAMME – A SHORT DESCRIPTION

Region Norrbotten, Troms og Finnmarks fylkeskommune and Lapin Liitto have been commissioned to coordinate the process of developing the proposed programme. A work organized under the so-called Joint Programming Committee (JPC) where all concerned regions in the three countries as well as the Sametingen are represented.

The objective of the programme is to stimulate cross border cooperation through funding different types of cross border development projects. 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.

As in all ERDF-funded programme, interventions are structured under different thematic objectives. Such thematic objectives are in the forthcoming programme called policy objectives. Under every policy objective one or more specific objectives shall also be selected. It is the JPC that selects and proposes policy objectives and specific objectives, from a given list of possible objectives common to all cross-border programmes.

The proposed programme is not yet completed, but this final SEA is based on the version⁴ presented on June 8th, 2021.

Compared to the previous programme generation, this programme is designed to be more in line with the overall objectives of the interreg programmes, by e.g. giving the opportunity to select specific objectives focusing explicitly on the cross border added value of programme interventions.

The programme is structured along two hierarchical levels, one called priorities and one called specific objectives. All priorities and specific objectives are predefined and common for all interreg programs, and some are also common to other programmes. The joint programming committee for the Aurora has selected the programme focus based on these common predefined priorities and specific objectives.

The selected priorities and specific objectives proposed for the programme are:

Table 1 Proposed Priorities and Specific Objectives included in Programme Proposal

Priorities	Specific objectives
PO 1 A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity	Developing and enhancing research and innovation capacities and the uptake of advanced technologies
	Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investment
PO 2 A greener, low-carbon Europe	Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches
	Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution
	Promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy
PO 4. A more social Europe	Improving cross border access to education and training. Improving access to and the quality of education, training and lifelong learning across borders with a view to increasing the educational attainment and skills levels thereof as to be recognized across borders;
	Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation
ISO 1 better Interreg governance	Other actions to support better cooperation governance.

An important part of the programme is the financial allocation. The ERDF budget for the period is proposed to be 93.8 Million Euro, not including Norwegian IR-funding. ERDF and IR-funding taken together is projected to amount to 140 - 150 million Euro for the entire programme period. The ERDF will fund 65 pc. of total project cost while Norwegian IR will fund 50 pc. (Managing Authority Newsletter 30th March 2021). The financial allocation between the individual priorities and specific objectives are still to be decided.

⁴ FINAL DRAFT TO JPC Interreg Aurora version 4.2

4 THE SCOPING OF THE SEA

Part of the SEA process has been the scoping of the SEA. The scoping is reported in more detail in the Scoping report. The result of the scoping is also documented in the consultation notes at the end of this report.

The scoping was guided by the SEA directive (Directive 2001/42/EC) and by Swedish Environmental Code (Sect. 6, 3 §). According to this the SEA report shall identify, describe and assess considerable environmental impact (Sect. 6, 2 §). As environmental impact shall be considered: direct or indirect; temporary or permanent; cumulative or non-cumulative; long, medium or short term; impact on:

1. The population and public health
2. Animals or plants listed under national or EU legislation, and biodiversity in general
3. Land, soil, water, air quality, climate, landscape, built environment and cultural environment
4. Land-use, water-management and the physical environment in general
5. Other management of raw-materials, natural resources or energy
6. Other parts of the environment

The SEA shall, according to Swedish Environmental Code, contain all information reasonable with regards to:

- Current knowledge and methods of assessment
- The program content and level of detail
- Public interest
- The fact that certain issues are better assessed when subsequent plans or programs are made or in the examination of certain subsequent permits

The scope and level of detail of the SEA shall be reasonable in respect of the points above. This means that the SEA shall have the same level of detail as the program it concerns. This will mean that the SEA will be confined to a general level.

4.1 SCOPING OF PROGRAMME CONTENT

The scoping resulted in proposing that the following proposed Priorities and Specific objectives should be included in the full SEA.

Table 2 Result of scoping - Priorities and specific objectives to undergo SEA

Priorities	Specific objectives
PO 1 A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity	Developing and enhancing research and innovation capacities and the uptake of advanced technologies
	Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investment
PO 2 A greener, low-carbon Europe	Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches

	Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution
	Promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy
PO 4. A more social Europe	Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

Two specific priorities were exempt from the further SEA:

- Improving cross border access to education and training. Improving access to and the quality of education, training and lifelong learning across borders with a view to increasing the educational attainment and skills levels thereof as to be recognized across borders;
- Other actions to support better cooperation governance.

The two were excluded because they were not considered to have any significant impact on the environment. Below the remaining specific objectives to be included in the SEA are listed:

- Enhancing research and innovation capacities and the uptake of advanced technologies
- Enhancing growth and competitiveness of SMEs
- Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches
- Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution
- Promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy
- Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation

5 METHODS OF ENVIRONMENTAL ASSESSMENT

There are different options with regards to the methods used in an SEA. In principle the SEA can be based either on objectives, e.g. using the Agenda 2030 objectives as reference for the SEA; or based on some form of base-line assessing the program against a current situation (base-line).

As the bases for the scoping a method based on objectives were attempted. However it is now our conclusion that the final SEA is better carried out against a base-line method, i.e. that any possible impact of the program shall be assessed against the current situation.

This means that any foreseeable consequences from the specific objectives will be judged against the background of today's situation.

In most SEA:s the assessment contains three parameters: impact, effect and consequences. Through combining the three an assesment of an individual project can be made. With regards to the Aurora programme any assessment of a programme such as the future aurora programme is suffering from an information shortage with regards to the details of funded projects. This means that the SEA cannot go into detail on the impact, effects or consequences of the programme.

As part of the SEA is also a discussion on alternative or counterfactual situation. The alternative used in this SEA is the no-funding at all-situation. This is discussed as a reference- or base-line alternative. Any situation where e.g. the geographical area of the programme has been altered has not been considered realistic.

6 ASSESSMENT OF POSSIBLE PROGRAMME IMPACT ON ENVIRONMENTAL ASPECTS

Below are given WSP's preliminary assessment on all the proposed specific objectives, except those decided not to include in the scoping (see chapter 4).

6.1 SPECIFIC OBJECTIVE: ENHANCING RESEARCH AND INNOVATION CAPACITIES AND THE UPTAKE OF ADVANCED TECHNOLOGIES

One of the reasons for the programme committee's decision to select this specific objective is that the R&D investments in the programme area is lower than in e.g. the metropolitan regions of the three programme countries. One main objective of the programme is to help increase the investment in R&D and the uptake of advanced technologies in the programme area firms and communities.

It is claimed in the draft programme, that "today's industrial structure in the programme area is a combination of sustainable utilization of natural resources and initiatives to promote advanced technology". Data suggests however that some of the largest net-contributors to CO² emissions in the Nordics are in fact the industry in the programme area. Several of Sweden's absolutely largest emitters are based in the programme area, including SSAB and LKAB plants (SCB, Naturvårdsverket). In Finland two of the ten largest CO₂-emitters, including the number one emitter (the steel plant in Rahe) are within the Aurora programme area (Statistikcentralen, Energimyndigheten) Nordland and Troms og Finnmark fylken are the two fylken with the highest CO² emissions per capita in Norway (including other oilbased regional economies such as Vestland and Rogaland fylken for example) (SSB, Miljødirektoratet).

Major investments are however now planned for or already taking place to make the industries of the programme region more sustainable, with regards to CO² emissions.

It is WSP's assessment that the Aurora programme may play an important role in reducing CO² emissions from the area's industries. Research and innovation capacities, and the uptake of advanced technologies are of vital importance for achieving such a goal. However, as the programme content under this specific objective is framed, it cannot be ruled out that investments in R&D may also serve to further stimulate fossil industries, instead of e.g. actively reducing CO² emissions. Such funding will slow down the possible progress in reducing CO₂ emissions or reducing other negative impact on the environment of the region.

WSP notes that it has now been included, under the section main target groups, a sentence stating *all projects under this priority* shall have a sustainability focus (see also annex 3). WSP would like to stress the importance of this, and that measures in the further programming process are taken to make sure that this requirement is transformed into the programme selection mechanism (selection criteria).

6.2 SPECIFIC OBJECTIVE: ENHANCING GROWTH AND COMPETITIVENESS OF SME:S

Besides the mainly large firms involved in the natural resources industry, a large share of the region's industry are found among small and medium sized firms, or even micro enterprises. The latter is especially true when assessing the Sami industries.

This specific objective focuses on meeting the needs of such firms, e.g. promoting collaboration to gain access to know-how and other resources that they themselves lack. The Sámi Area is in need of a more diversified competence and business structure to provide jobs for the young Sámi population.

In the scoping process we identified that support mechanisms under this specific objective may involve negative impact on the environment, e.g. regarding both climate aspects as well as local environmental aspects. One example where potential negative impact may be important is regarding investments in the tourism industry, where investments unless well monitored may have adverse impact both on natural environmental assets as well as on CO² emissions. At the same time, it is necessary for all firms, big or small, to oversee its business strategies and to make sure that their business models are sustainable.

WSP notes that it has now been included, under the section main target groups, a sentence stating *all projects under this priority* shall have a sustainability focus (see also annex 3). WSP would like to stress the importance of this, and that measures in the further programming process are taken to make sure that this requirement is transformed into the programme selection mechanism (selection criteria).

6.3 SPECIFIC OBJECTIVE: PROMOTING CLIMATE CHANGE ADAPTATION AND DISASTER RISK PREVENTION, RESILIENCE, TAKING INTO ACCOUNT ECO-SYSTEM BASED APPROACHES

The measures under this specific objective target specifically 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.

This include awareness raising and communication, designing, adapting methods and methodologies, experience exchange, best practices and learning as result of joint implementation. In focus are cross-border cooperation.

Although we foresee positive environmental assessment general measures of precaution need to be taken at the level of implementing projects to make sure that e.g. any local negative impacts are avoided. This is a general recommendation, that is important throughout the programme, and that will be further developed as such, in section 6.9 below.

6.4 SPECIFIC OBJECTIVE: ENHANCING PROTECTION AND PRESERVATION OF NATURE, BIODIVERSITY AND GREEN INFRASTRUCTURE, INCLUDING IN URBAN AREAS, AND REDUCING ALL FORMS OF POLLUTION

As is noticed in above, there are many designated areas of natural protection, including several important trans-border natural areas and connected cross-border ecosystems, in the region. However, the majority of the programme area is still not under specific legal protection. This specific objective is about increasing the protection of areas and preserving biodiversity and habitats in the programme area.

We foresee mainly positive environmental impact from these measures. Also for this measure, specific precaution is needed at the level of implementing projects, e.g. with regards to restoration, to make sure that any local negative impacts are avoided. Such precaution is further dealt with in section 6.9 below.

6.5 SPECIFIC OBJECTIVE: PROMOTING SUSTAINABLE MULTIMODAL URBAN MOBILITY, AS PART OF TRANSITION TO A NET ZERO CARBON ECONOMY

This specific objective is justified referring to the large emissions from the transport sector in the region, promoting investment in a transport system that reduces the CO² emissions as well as increasing the interconnectivity of the regions in the programme area and its small urban areas.

A wide range of investments are to be made possible under this specific objective, they include:

- 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

It is WSP's assessment that the Aurora programme may play a part in the transition to a more sustainable transport system in the programme area. However, as the programme content under this specific objective is formed, is not mandatory for funded projects to specifically address sustainability.

WSP notes that it has now been included, under the section main target groups, a sentence stating *all projects under this priority* shall have a sustainability focus (see also annex 3). WSP would like to stress the importance of this, and that measures in the further programming process are taken to make sure that this requirement is transformed into the programme selection mechanism (selection criteria).

6.6 SPECIFIC OBJECTIVE: ENHANCING THE ROLE OF CULTURE AND SUSTAINABLE TOURISM IN ECONOMIC DEVELOPMENT, SOCIAL INCLUSION AND SOCIAL INNOVATION

Like in other areas, the tourism and culture sectors of the programme area have been adversely and severely affected by the pandemic and the restrictions undertaken to control it. Especially cross-border and international tourism has been negatively impacted.

This specific objective focuses on the recovery, stabilization and adaptation to “a new reality” with regards to the tourism industries. Some of the area's most popular destinations (such as Nordkapp, The Ice Hotel and Santa Claus Village) were prior to 2020 highly dependent on long-range and short-stay visitors, and are now likely to be in need for transforming their business models into more sustainable ones. The area is at the same time home to a large number of small-scale tourism based on a rich and unique cultural heritage and on sustainable models. The Sámi culture and languages are an important part of this heritage that needs to be sustained and developed for a

functional area. Traditional livelihoods and [traditional] utilisation of the nature is integral part of cultural values, and loss of traditional knowledge are seen as prominent.

The specific objective focus on developing the role of culture and sustainable tourism in the program area. The framing of this specific objective can also be altered to call for a mandatory focus on sustainability in funded investments, both regarding enhancing the role of culture and the promotion of sustainable tourism.

WSP notes that it has now been included, under the section main target groups, a sentence stating *all projects under this priority* shall have a sustainability focus (see also annex 3). WSP would like to stress the importance of this, and that measures in the further programming process are taken to make sure that this requirement is transformed into the programme selection mechanism (selection criteria).

6.7 ASSESMENT OF PROGRAMME CONTRIBUTION TO AGENDA 2030

Summarizing the above assessment, we foresee that the program will contribute to many of the 17 goals in Agenda 2030. However we have also identified that there is a risk involved that the program might have a negative impact on some of the goals. The possible impacts or summarized in the table below.

Priorities	Specific objectives	Impact on global goals (Agenda 2030)
PO 1 A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity	Developing and enhancing research and innovation capacities and the uptake of advanced technologies	Mainly positive impact on goals: 7, 8, 9, 11, 12, 14 Negative impact on 9, 13, 14, 15 cannot be ruled out.
	Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investment	Mainly positive impact on goals: 8, 9, 11, 12, 13 Negative impact on 9, 11, 12, 13, 14, 15 cannot be ruled out.
PO 2 A greener, low-carbon Europe	Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches	Mainly positive impact on goals: 11, 15 Negative impact on 15 cannot be ruled out.
	Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution	Mainly positive impact on goals: 6, 11, 13,15 Negative impact on 15 cannot be ruled out.

	Promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy	Mainly positive impact on goals: 11, 15 Negative impact on 15 cannot be ruled out.
PO 4. A more social Europe	Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation	Mainly positive impact on goals: 11, 15 Negative impact on 12, 15 cannot be ruled out.

Key to the Global goals: ;1: No Poverty, 2: Zero Hunger 3: Good Health and Well-being

4: Quality Education, 5: Gender Equality, 6: Clean Water and Sanitation

7: Affordable and Clean Energy, 8: Decent Work and Economic Growth 9 Industry, Innovation and Infrastructure, 10: Reduced Inequality 11: Sustainable Cities and Communities

12: Responsible Consumption and Production, 13: Climate Action, 14: Life Below Water,

15: Life on Land, 16: Peace and Justice Strong Institutions, 17: Partnerships to achieve the Goal

6.8 ASSESMENT OF RESOURCE ALLOCATION

The allocation of resources is a key issue for assessing the environmental impact of the programme. Following the assessment above we can foresee both positive and negative impact on the environment, partly subject to variation depending on which specific objective, and thus depending on how much of the total resources is spent on each specific objective.

Although sustainability is a key-aspect of projects throughout the programme. We can foresee that the risk of negative impact is higher in some of the selected specific objectives than in others.

For some of the selected specific objectives we foresee a positive impact on the environment, i.e. for the specific objectives of *Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches*, and the specific objective *Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution*.

For one specific objective - *Enhancing growth and competitiveness of SMEs* – we anticipated mainly negative impact in the scoping document, although that risk can be reduced by following WSP:s recommendations in section 6.9. And for the remaining specific objectives we either anticipated a mix of positive or negative impact or little or none overall impact.

From an exclusive environmental point of view, an optimal resource allocation should of course maximize the financial resources spent on the specific objectives which are most likely to have a positive impact and to minimize resources spent on the specific objectives where we have reasons to fear negative impact. However, such an argument is difficult to uphold for several reasons: firstly, *not* causing a negative environmental impact is not the only objective of the investment; secondly, a risk for a negative impact may be handled through well designed selection criteria and monitoring systems and outweighed by its other positive impact; and thirdly, predicted co-funding conditions may set limits that mean that an optimal resource allocation is not possible. To exemplify, under specific objective 1a private funding is likely while it is much less so under specific objective 2. Overbalancing the budget in favor of specific objective 2 might risk not finding enough cofunding leaving resources unused at the

end of the day. Thus, the budget allocation is a balancing act where other aspects than the possible environmental impact also need to be considered.

Bearing the above discussion in mind, we conclude with two notes under this section. Firstly we encourage the programming committee to consider all options for increasing the allocations for specific objectives *Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches*, and the specific objective *Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution*, of course taking co-funding into account.

Secondly, we reinforce the importance of avoiding funding projects with possible negative impact under other specific objectives. This is especially important for objectives with a proposed large budget allocation, as can be foreseen for specific objective 1a. This can be done by ensuring exclusively funding projects with a positive environmental impact. It may also be accomplished by having strong selection criteria and an efficient monitoring system in place.

The proposed financial allocation suggests that priority 1 receives a larger share (approx. 35%), and priority 5 a smaller share (approx. 11%) of the total budget. Other priorities approximately share the remaining budget equally. In the light of the above discussion, we find that the proposed financial allocation is reasonably balanced and will be in line with achieving the requirements of the green deal.

6.9 ASSESSMENT OF ACTIONS TAKEN TO REDUCE NEGATIVE ENVIRONMENTAL IMPACT, IN E.G. THE PROGRAMMING STAGE AND THROUGH SYSTEMS OF MONITORING

The management of the programme is in many ways key to what environmental impact we might expect from the implementation of the programme. Since it is difficult to foresee all individual projects in detail there is a strong need for having a programme management at place, that can reduce the risk of funding projects with a possible negative impact on the different aspects of environment assessed in this report.

In the interreg programme such management can be achieved by selection criteria and by a close monitoring of environmental aspects after projects having been selected, including some mechanism of stopping funding for projects that do not live up to the environmental standards set out in the programme. Of course, national and EU legislation is also in place to secure that negative environmental impacts shall not be the result. However, the measures of project selection and programme monitoring that is suggested in this section is complementary to legislation.

Project selection criteria are decided by the programme monitoring committee (PMC). So, the recommendations here has to be addressed by the drafting of the programme and finalized by a decision in the PMC. We have recommended specific mandatory selection criteria promoting projects with a positive impact on the environment for the following specific objectives:

- (Developing and enhancing research and innovation capacities and the uptake of advanced technologies
- Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investment
- Promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy

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

For all specific objectives we recommend that projects' environmental impact are closely and continuously monitored throughout the projects. This can be done through the project reporting system and in combination with an ongoing programme evaluation.

6.10 THE IMPACT OF NOT FUNDING THE AURORA PROGRAMME

In the first draft we discussed the alternatives to funding the Aurora programme. In the final version of the SEA we will discuss the environmental impact of not having funded the Aurora programme at all as the alternative to funding the programme.

It is our conclusion that a situation with non-funding will mean a set-back in relation to the overall objectives of the programme. Its impact will vary between the different specific objectives because the anticipated dead-weight varies between and within specific objectives.

Mainly a non-funding situation will slow down the positive anticipated impact from all specific objectives. This means that positive impacts on sustainable innovations or business models for SME:s are slowed down. Projected climate change adaptation and risk management as well as efforts preserving natural habitats are either not taking place or are being slowed down. So are also the plans for new sustainable urban and regional transport and sustainable tourism. Thus, an alternative where the programme does not receive funding can be foreseen to be negative for the environment of the programme area.

Of course, some of the risks anticipated in the previous sections may also not be realized. However, some of the private investments may take place even without the programme funding in place, but will not be monitored without the programme. This considered, a non-funding is by all available knowledge a situation which will make the environmental situation in the programme area worse off in comparison to funding the programme.

It is our conclusion that there are no benefits in terms of sustainability or environmental risk from an alternative where the Aurora programme is not funded.

7 NON TECHNICAL SUMMARY AND CONCLUSION

This summarizes the fundings and conclusions of the SEA for the proposed Aurora programme in 2021 – 2027. The SEA is based on the SEA Directive (Directive 2001/42/EC).

The programme area is outlined in the map below.

Interreg Aurora



The programme involves projected investment of approximately 140 meur over the 7-year period. Investments will be directed towards the following priorities and objectives.

Priorities	Specific objectives
PO 1 A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity	Developing and enhancing research and innovation capacities and the uptake of advanced technologies
	Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investment

PO 2 A greener, low-carbon Europe	Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches
	Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution
	Promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy
PO 4. A more social Europe	Improving cross border access to education and training. Improving access to and the quality of education, training and lifelong learning across borders with a view to increasing the educational attainment and skills levels thereof as to be recognised across borders;
	Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation
ISO 1 better Interreg governance	Other actions to support better cooperation governance.

After a scoping process we have concluded in the following anticipated environmental impact from the assessed specific objectives.

Priorities	Specific objectives	Impact on global goals (Agenda 2030)	SEA recommendations
PO 1 A more competitive and smarter Europe by promoting innovative and smart economic transformation and regional ICT connectivity	Developing and enhancing research and innovation capacities and the uptake of advanced technologies	Mainly positive impact on goals: 7, 8, 9, 11, 12, 14 Negative impact on 9, 13, 14, 15 cannot be ruled out.	Make sure recommendations on a focus on sustainability is reflected in selection criteria
	(Enhancing sustainable growth and competitiveness of SMEs and job creation in SMEs, including by productive investment	Mainly positive impact on goals: 8, 9, 11, 12, 13 Negative impact on 9, 11, 12, 13, 14, 15 cannot be ruled out.	Make sure recommendations on a focus on sustainability is reflected in selection criteria
PO 2 A greener, low-carbon Europe	Promoting climate change adaptation and disaster risk prevention, resilience, taking into account eco-system based approaches	Mainly positive impact on goals: 11, 15 Negative impact on 15 cannot be ruled out.	
	Enhancing protection and preservation of nature, biodiversity and green infrastructure, including in urban areas, and reducing all forms of pollution	Mainly positive impact on goals: 6, 11, 13,15 Negative impact on 15 cannot be ruled out.	

	Promoting sustainable multimodal urban mobility, as part of transition to a net zero carbon economy	Mainly positive impact on goals: 11, 15 Negative impact on 15 cannot be ruled out.	Make sure recommendations on a focus on sustainability is reflected in selection criteria
PO 4. A more social Europe	Enhancing the role of culture and sustainable tourism in economic development, social inclusion and social innovation	Mainly positive impact on goals: 11, 15 Negative impact on 12, 15 cannot be ruled out.	Make sure recommendations on a focus on sustainability is reflected in selection criteria

Furhermore it cannot be ruled out that local, but still considerable, negative impact may result from any of the projects funded under the programme. The recommendation is therefore to make sure that the monitoring and evaluation systems in place can detect and stop any such projects.

The allocation of financial resources is also key to the SEA. It is the conclusion from the SEA that increased budgets on specific objectives not exclusively designated to a greener Europe (PO 2) must be followed by strong selection criteria and efficient systems of monitoring and evaluation as suggested above. Bearing this in mind it is our conclusion that the programme financial allocation is well balanced and will enable reaching the commitments under the green deal.

Finally, it is the conclusion that an alternative where the Aurora programme will not receive funding will not be beneficial to a sustainable development of the programme area.

8 REFERENCES

FINAL DRAFT TO JPC Interreg Aurora version 4.2, presented on June 8th, 2021.

SEA directive (Directive 2001/42/EC), DIRECTIVE 2001/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment

(COM(2018) 374 final, 2018/0199(COD)) Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on specific provisions for the European territorial cooperation goal (Interreg) supported by the European Regional Development Fund and external financing instruments

<https://skyddadnatur.naturvardsverket.se/>

<https://www.metsa.fi/sv/natur-och-kulturarv/>

Vernet natur - Miljødirektoratet (miljodirektoratet.no)

Interreg Aurora, Managing Authority Newsletter 30th March 2021, Länsstyrelsen Norrbottens län.

Home | Sustainable Development (un.org)

9 ATTACHMENTS

1. Scoping document
2. First draft SEA
3. Consultation-notes