In accordance with EC guidance, a Strategic Environmental Assessment (SEA) has been carried out during the programme planning process for the Northern Periphery Programme 2007-2013. Following an open call for proposals, the European Policies Research Centre at Strathclyde University in Glasgow, Scotland was selected to carry out the SEA and Ex Ante Evaluation.

The programme planning process has been carried out in close co-ordination with the Strategic Environmental Assessment. This has allowed the evaluator to play an active and constructive role during the design and drafting of the Operational Programme. The environmental evaluation has been highly valuable in this process and has positively influenced the development of the programme.

An outline of the operation and results of the SEA is provided in this document and covers the following points:

**Overview of the SEA**

a) A non-technical summary of the SEA required under Annex I(j) of the SEA directive.

b) Information on the public consultation and consultation of environmental authorities.

c) Information on the decision required by Article 9(1).

d) Description of the measures decided concerning monitoring (Art 10 of the Directive).

The SEA Report and this SEA Summary document, particularly Section (c), are being made publicly available for download on the Northern Periphery Programme 2007-2013 website. Paper copies will be available on request. These documents have also been circulated widely amongst the programming partners.
Overview of the SEA

The role of the Strategic Environmental Assessment (SEA) is to highlight environmental considerations during the preparation and adoption of the programme, ensuring that significant effects on the environment are identified, described and assessed, and taken into account in that process. It subsequently forms the basis for monitoring the environmental impacts of the programme. Preparation of the environmental report and integration of environmental factors form an iterative process that contributes to sustainable solutions in decision-making. The findings of the SEA are not binding on the NPP Managing Authority, but they do allow scope to create targeted environmental impact.

The SEA report was prepared in accordance with Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment. The report is divided into four parts:

i) A review of the environmental context of the Northern Periphery Programme. This includes consideration of the environmental performance of the Interreg IIIIB NPP 2000-2006, an overview of the priorities of the Northern Periphery Programme 2007-2013, and a review of the scope that exists for synergy with environmental strategies, programmes and policies.

ii) Examination of the environmental baseline and trends, according to a range of themes. Commencing with a summary of regional environmental distinctiveness, it reviews natural resources and biodiversity, energy, waste, transport and tourism.

iii) Identification of strategic environmental issues, comprising the selected themes of climate change, tourism, waste, and marine pollution (see Table 1).

Table 1: Strategic environmental issues in the programme area

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Climate Change</strong></td>
<td>Continued climate change is expected to have significant impacts on the natural environment and daily life of people across the Northern Periphery, including new opportunities to develop industries in regions that have previously been excluded from certain economic activities. Preparations for climate change should ensure that people, natural environments, spatial structures experience minimal disturbance, while using the favourable impacts of climate change to advantage.</td>
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<tr>
<td><strong>Tourism</strong></td>
<td>Tourism is a major asset in the Northern Periphery, particularly with regard to jobs in rural areas, but it can also challenge the preservation of biological diversity and valuable landscapes, undermine cultural identity and the interests of indigenous people. The seasonal aspect of tourism, coupled with the concentration of tourists in certain regions, can increase environmental pressures in relation to energy and water supply, wastewater treatment, waste generation, traffic congestion and emissions.</td>
</tr>
<tr>
<td><strong>Waste</strong></td>
<td>Waste management is a key issue for small communities in the Northern Periphery, and there is an urgent need to tackle the root causes and environmental impact of increasing waste. Long distances and a sparse population bring challenges for waste handling, economy of collection and waste disposal. Waste minimisation techniques should be explored, including alternative procedures and processes, recycling, increased re-use and decomposition and energy recovery.</td>
</tr>
<tr>
<td><strong>Marine Pollution</strong></td>
<td>From an EU environmental perspective, the marine environment is a target for conservation, restoration and sustainable use. Maritime issues are important for most of the NPP area. Coastal zone management is required to resolve competition for limited land resources between aquaculture, construction, traffic and nature protection, and harbour sediments are contaminated with chemicals and heavy metals, meaning that most of these areas have restrictions on consumption of seafood.</td>
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</table>
iv) An environmental impact assessment. This appraises the programme vision, priorities and objectives, in accordance with the EU Sustainable Development Strategy and the 6th Environmental Action Programme, and the impact on the strategic environmental issues (see Table 2). It includes a discussion of likely significant effects on the environment, measures envisaged in preventing adverse effects, and potential indicators for monitoring environmental effectiveness.

**Table 2: Programme environmental conformity and potential impact**

<table>
<thead>
<tr>
<th>Programme Vision</th>
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<tr>
<td>Corresponds with objectives to limit climate change and its costs to society, breaking the link between economic growth and environmental degradation, and aiming for sustainable production and consumption. It allows broad scope to address the strategic environmental issues, as well as benefiting the region with other forms of environmental gain.</td>
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</table>

**Priority 1**

Offers scope for cost-effectiveness through energy-saving and technological development that decouples economic growth and environmental pressure, the reduction of greenhouse gas emissions in the transport sector, sustainable use of the marine environment and coasts, and waste reduction. Gains in energy efficiency from renewables may lead to greater competitiveness and distinctiveness. New networks and knowledge transfer that develop new and existing products, as well as provide support in addressing and reaching markets, could benefit the environmental sector through higher profile and a regional brand image related to high environmental quality. ICT can reduce travel and associated environmental impacts of traffic, and the resulting reduction in out-migration could sustain rural communities and retain local environmental management skills. Transport infrastructure maintenance and development can be environmentally beneficial if it supports modal transfer.

**Priority 2**

Offers scope for sustainable use of natural resources and levels of waste, maintaining biodiversity, protecting habitats and natural systems, the dissemination of technology on clean and renewable energy systems and reduced energy consumption. It supports minimising the undesirable impacts of transport, tackling noise, congestion and pollution, and avoiding adverse impacts on human health. Sustainable production and consumption may reduce waste and increase recycling. Assisting urban-rural partnerships and looking for new service solutions allows scope to be innovative and support targeted environmental change. Exploiting opportunities presented by bio-fuels and other renewable energy sources to develop small-scale sustainable solutions, as well as energy-saving initiatives for rural and remote communities, companies and households, will assist the overall transition to renewables. In addition to stimulating the environmental sector, preserving biodiversity, ecosystems and habitats, this could encourage new companies and services that strengthen communities and improve the urban-rural balance.

References to EU environmental directives, national environmental strategies and other policy documents relevant for the OP are included as appendices to the SEA report.
a) A non-technical summary of the SEA required under Annex I (j) of the SEA directive.

<table>
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<tr>
<th>Executive Summary of SEA Report</th>
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<tr>
<td>The Interreg IV Northern Periphery Programme (NPP) for 2007-2013 aims to assist peripheral and remote communities on the northern margins of Europe to develop their economic, social and environmental potential. The eligible regions are located in Finland, Ireland, Northern Ireland, Sweden, Scotland, Greenland, Iceland, Norway and the Faeroe Islands.</td>
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<tr>
<td>The current Interreg IIIB Northern Periphery Programme, which concludes in 2006, has performed well in environmental evaluations. It corresponds to the core elements of the Gothenburg agenda, for example supporting projects on sustainable transportation and ecological waste treatment, and it has exceeded its target for projects focused on environmental improvement. However, baseline data have remained largely descriptive, due to difficulties in comparability, and the programme contains no estimates of environmental impact or environmental indicators at programme level.</td>
</tr>
<tr>
<td>The new NPP has two thematic priorities: Promoting Innovation and Competitiveness in Remote and Peripheral Areas, with accessibility as a main theme; and Sustainable Development of Natural and Community Resources, encompassing environmental management, climate change and renewable energy. Through transnational co-operation, knowledge transfer and the exchange of experience, the programme seeks to secure balanced and sustainable development in the Northern Periphery.</td>
</tr>
<tr>
<td>Various environmental themes relevant for the programme are highlighted in the baseline data and trends, using data drawn from sources in the nine participating regions. Natural resources and biodiversity relates to the extent and wealth of protected areas, habitats, flora and fauna. Energy considers sectoral demand and consumption, as well as current provision by source, highlighting the contribution from renewables and the scope to expand its share. Waste provides information on generation and landfill capacity, emphasising the need for recycling and improved waste management. Transport relates to road traffic, associated emissions, and the policy objective of promoting greater use of public transport. Tourism is considered in its role as an important source of investment and employment, based principally on the quality and diversity of natural and cultural environments.</td>
</tr>
<tr>
<td>For the NPP area, four strategic environmental issues are identified, reflecting the topics raised in the programme’s SWOT analysis. Climate change is expected to have extensive negative impacts in the NPP area, increasing temperatures and risks of coastal flooding, as well as abrupt changes to ecosystems. It may also bring opportunities in areas such as tourism and outdoor activities. Waste management is seen as a growing problem as volume increases each year, but in addition to resolving this issue, investment in new facilities and techniques might convert this burden into an asset. Tourism is identified as important for the economy, but also challenging for biological diversity, valuable landscapes and historic sites, as well as potentially undermining rural life and local identity. Marine pollution is an issue affecting most of the programme area, threatening the future resource base.</td>
</tr>
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</table>
In the strategic environmental assessment, the programme’s vision and priorities are considered against the EU Sustainable Development Strategy and the EU Sixth Environmental Section Programme. This analysis demonstrates a clear compatibility between the EU policies and the NPP programming document. Thereafter, each of the objectives is assessed for potential impacts on the strategic environmental issues. Positive impacts promoting environmental gain could include environmental innovation, renewable energy, modal transfer to public transport, SME environmental management accreditation, stimulating the environment sector, and controlling environmental tourism. Negative impacts could encompass minimum compliance in meeting environmental standards, increased transport with associated noise, emissions and fuel consumption, ecological damage from road construction, increased waste generation, erosion, and loss of urban-rural distinctions and wilderness.

With regard to significant effects, the NPP is aimed at small-scale developments providing high-quality solutions within a framework of sustainable development. In this scenario, the programme has potential for significant long-term effects, which could be cumulative as a momentum develops within the programme area. There is considerable scope for very favourable outcomes environmentally, and full realisation of positive potential could elevate the programme to level where the economy-environment interactions act as a model of best practice for other programmes. Guarding against the opposite scenario, where the programme generates a negative momentum with inter-related impacts, requires careful management and mitigation.

To mitigate negative impacts, the programme must convey a clear message that positive environmental impact is a key element of the programme’s strategy and that competitiveness should be based on high environmental standards and environmental management techniques. Innovation should be understood to include environmental excellence as a means of fulfilling the vision that the NPP is pursuing. The scale of development should be carefully monitored, especially with regard to transport and road construction, to ensure that impacts are within environmental carrying capacity. Project proposals should demonstrate sustainability, be accompanied by environmental impact assessments, and provide evidence that impacts on biodiversity, air, water and soil have been evaluated and can be measured during implementation.

Monitoring indicators are required to determine environmental effectiveness. In practice, these indicators should reflect not only effectiveness in addressing strategic environmental issues but also contribute to measuring the effectiveness of the NPP overall. A range of potential indicators is provided, with suggestions for the division between priorities and sub-themes.
b) Information on the public consultation and consultation of environmental authorities.

The encompassment of an open public consultation process involving the participating regions and environmental authorities has been key to the development process. An open public consultation process for the draft Strategic Environmental Assessment (SEA) report was held from mid-September until 27 October. The consultation report was distributed to a wide range of stakeholders and was e-mailed directly to all members of the Joint Programming Committee who were responsible for circulating the consultation report to relevant environmental organisations in their respective countries. All national environmental authorities in the programme partner countries were targeted, as well as regional authorities if they exist.

Section 3.1 of the SEA Report describes how the programme-drafting process involved direct consultation with a network of environmental contacts in each of the participating countries, including the following organisations:

- Scottish Natural Heritage;
- Swedish Environmental Protection Agency and Ministry of Industry;
- Finnish Ministry of Environment;
- Faeroese Food, Veterinary and Environment Agency;
- Environmental Protection Agency, Republic of Ireland,
- Northern Ireland Statistics and Research Agency
- Akvaplan-Niva, Norway;
- Department of the Environment, Greenland;
- Ministry for the Environment, Iceland.

Additionally, the draft programme was made publicly available through the NPP website for public authorities and the general public to access and offer comments. Information on the opportunity to take part in the consultation process was promoted at several national programme events and hearings, as well as on the websites of many of the programming partners. Non-governmental organisations (NGOs) and the voluntary sector were afforded the opportunity to participate as part of the general SEA consultation. Paper copies of the consultation documents were available from programme representatives on request.

English is the sole working language of the Northern Periphery Programme and the consultation SEA report and Operational Programme were widely available in the English language. No official translations of the SEA Report were made, but programme representatives were available to assist with any language issues, if they were to arise.

There has, therefore, been an open SEA consultation process in each of the programme nations.

Responses and results of consultation process

On the whole, responses to the SEA consultation report were very positive and the comments mainly covered minor editing issues rather than substantive feedback on the content. Responses to the SEA consultation were subsequently integrated into the final version of the SEA Report.
Due to the nature of the responses to the SEA consultation, no updates were required to the Operational Programme as a result of the environmental consultation process. The SEA consultation comments primarily covered minor editing issues of relevance to the SEA report and its contents. No issues were highlighted that affected the OP strategy or content.
c) Information on the decision required by Article 9(1).

The evaluators have positively influenced the design of the programme through an interactive and iterative dialogue with the drafting teams and committees. A concerted effort has been made to integrate recommendations from the Strategic Environmental Assessment, which has proven an important tool in the development of the programme’s strategy. In particular, as shown in Table 1, the SEA highlights four strategic environmental issues to be tackled in the programme area: climate change, tourism, waste, and marine pollution. These topics have informed the environmental and SWOT analyses contained in the Operational Programme, as well as influencing the strategic development of the programme’s priority axes.

Chapter 4.4 of the Operational Programme contains an environmental analysis of the programme area and has been developed in close cooperation with the SEA to cover the four strategic topics outlined above. This environmental analysis is subsequently reflected and summarised in the SWOT analysis which, for example, incorporates climate change and environmental pollution as being amongst the most significant threats to the programme area. Priority 2 acknowledges the unspoiled natural environment as one of the most significant assets of the Northern Periphery. It supports the sharing, expansion and development of skills in environmental management and sustainable development, designed to make an important contribution to the preservation and management of natural resources. Priority 2 also addresses the issue of climate change in the Northern Periphery, favouring more innovative public management policies. The sustainable exploitation of bio-fuels and other alternative energy sources are perceived as opportunities for innovative business development that can provide sustainable services to remote areas. It is therefore evident that Priority 2 addresses many of the environmental issues covered in the SEA Report, such as renewable energy, climate change, waste minimisation, coastal zone management and sustainable tourism.

The SEA demonstrates a clear compatibility between EU environmental policy frameworks and the vision, priorities and objectives of the Northern Periphery Programme 2007-2013; a synthesis of which can be found in Table 2. It is recognised that the NPP has considerable scope for environmentally favourable outcomes, particularly due to the programme’s focus on small-scale developments and high-quality solutions. Nevertheless, it is important to mitigate against any possible negative environmental aspects. The integration of sustainable development as a horizontal principle is crucial to the programme’s strategy and, in accordance with SEA recommendations, a clear message will also be conveyed that positive environmental impacts are an essential element of the programme’s implementation. High environmental standards and requirements will therefore be integrated into future project guidance and monitoring. Section 5.5 of the SEA Report on Mitigation will be a crucial tool in the development of future project criteria and guidance on the horizontal principle of sustainable development.

Alternatives

When developing a plan or programme, it is normal practice to propose different ways of fulfilling the objectives, each of which has distinctive environmental characteristics. However, in the Northern Periphery Programme, the path followed is best described as consensual. Rather than choosing between contrasting visions or objectives, the strategy and priorities of the programme have evolved and become more detailed in an incremental fashion.
At an early stage, the decision was taken not to support infrastructure. The reasoning related to reduced ERDF funding as well as the increased geographical coverage of the programme. In seeking to maximise programme economic impact, this positive step assisted in minimising environmental impact.

The first version of the programme priorities was broad and unfocused. However, Priority 2 already acknowledged that conserving the region’s natural environment was of global importance, as well as being economically important to the region. It also encompassed renewable energy projects as a response to climate change. As the priorities became more focused, it was agreed that Priority 2 should promote environmental potential through green development and eco-business, as well as recognising the environmental benefits of ICT, themes that more closely reflected the emphases in the Community Strategic Guidelines.

Sustainable development has always been a priority throughout the programme development process. In the third version of the programme, it became a horizontal principle, meaning that each project within the programme must be aware of its economic, social and ecological impacts and should contribute to the Gothenburg agenda. A broad view of sustainable development has been adopted that includes maintaining cultural resources and developing local communities, supporting these features through innovative implementation models and multi-sector co-operation.

In June 2006, the Spatial North conference was used as an opportunity to gather a wide range of opinion on the programme approach and priorities. A list of appropriate themes highlighted by participants in workshops included natural resources, sustainable energy and measures to tackle climate change, coastal management, and environmental and culture-based tourism. As a result, Priority 2 was modified from ‘natural and cultural resources and sustainable local development’ into ‘sustainable development of natural and community resources’, and the SWOT analysis was expanded to reflect the threats and opportunities emerging from climate change in areas such as agriculture, natural resources and shipping.

These modifications have been retained in the current version of the programme, in which more than 20% of the funds have been allocated to environment under Priority 2.

As noted above, an open SEA public consultation process was held in each of the programme partner nations. The SEA consultation responses covered minor editing issues of relevance to the SEA report and its contents. No issues were highlighted that affected the Operational Programme’s strategy, priorities or content. Subsequently, no revisions were made to the Operational Programme as a result of the SEA consultation process.

The final version of the Operational Programme integrated the recommendations of the SEA Report with regard to mitigation against possible negative environmental impacts. In accordance with SEA recommendations, a statement was added to the Operational Programme outlining that positive environmental impacts are an essential element of the programme’s implementation. A decision was also made to ensure high environmental standards and requirements are integrated into future project guidance and monitoring. As outlined above, Section 5.5 of the SEA Report on Mitigation will be used as an important tool in the development of future project criteria and guidance on the horizontal principle of sustainable development. Such criteria and guidance will be adopted by the future Programme Monitoring Committee.
d) Description of the measures decided concerning monitoring (Art 10 of the Directive).

Under the SEA Directive, there is a requirement to establish a monitoring programme to gauge environmental effectiveness. The series of environmental indicators developed for the NPP should inform on the impacts in addressing strategic environmental issues, as well as on the overall effectiveness of the programme.

The following table is taken from Section 5.6 of the SEA Report and provides examples of potential indicators that may be useful in monitoring different aspects of the programme’s performance, with suggestions for the division between themes in Priorities 1 and 2.

Table 3: Potential Environmental Indicators

| Promote competitiveness by increasing and developing the capacity for innovation and networking in rural and peripheral areas | • Employment in environmental jobs  
• New environmental products  
• New enterprises with environmental products or specialism  
• Evidence of energy saving  
• Waste generation, and percentage of waste being recycled, recovered, composted and landfilled  
• Environmental management certifications with ISO/EMAS  
• Formal agreements on environmental resource trading between businesses |
|---|---|
| Facilitate development by the use of advanced information and communication technologies and transport in the programme area | • Reductions/increases in travel or journeys made  
• Number of projects developing integrated transport options  
• Expansion in public transport  
• Volume of road traffic  
• Length of new road construction  
• Volume of air traffic  
• Change in condition of protected areas  
• Changes (net loss/gain) in biodiversity |
| Strengthen synergies between environmental protection and growth in remote and peripheral regions | • Numbers of plans and strategies prepared for parks, scenic areas, habitats etc  
• Percentage of energy/electricity generated from renewable sources  
• Emissions of greenhouse gases and key pollutants from differing sectors  
• Changes in condition of habitats  
• Percentage of rural land used for flood management  
• Change in percentage of water bodies deemed to be of good ecological status |
Improve sustainable development in peripheral regions by strengthening urban-rural relations and enhancing regional heritage

<table>
<thead>
<tr>
<th>Indicators</th>
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<tbody>
<tr>
<td>Number of archaeological sites, listed buildings, conservation areas judged to be at risk</td>
</tr>
<tr>
<td>Number of people visiting archaeological and historic sites</td>
</tr>
<tr>
<td>Use of chemicals, fertiliser and fuel</td>
</tr>
<tr>
<td>Concentrations of pollutants in rural and urban areas</td>
</tr>
<tr>
<td>Changes in land-use</td>
</tr>
<tr>
<td>Buildings restored</td>
</tr>
</tbody>
</table>

In accordance with Article 12 (4) of Regulation 1080/2006 regarding the European Regional Development Fund, a system of measurable and achievable indicators has been developed and is detailed in the Operational Programme. The principle of proportionality has been key to the design of the indicator system, which has drawn on experience from the implementation of the INTERREG IIIB Northern Periphery Programme and the various evaluations carried out, European Commission guidance, and recommendations from the Ex Ante and SEA Evaluators.

Each project is expected to respect and contribute to the horizontal principles, as detailed in Chapter 5.4 of the Operational Programme. A qualitative indicator system will, however, be used to assess and monitor information on the horizontal principles, which will draw on recommendations and potential indicators from the Strategic Environmental Assessment. Further project guidance and a model for capturing this information will be included in the Applicants Package and will utilise the indicators listed above. The exact indicators to be included will be agreed by the Programme Monitoring Committee and included in the Applicants Package.

Progress by projects in implementing the programme’s horizontal principles shall be collected from progress reports and through qualitative methods if applicable. Programme evaluations shall take into account the horizontal principles and monitor horizontal indicators. Other methods may be used to capture both qualitative and quantitative information on indicators, such as surveys of supported partners/firms, surveys of project partners, national statistics, etc. These will be reported to the European Commission when relevant.

All information on indicators shall be aggregated at a programme level annually and reported to the European Commission in the annual report submitted by the Managing Authority. Information on impacts and qualitative information on indicators shall be included in the annual report when available.

**Development of Monitoring System**

A task force was established to develop a new indicator system for the Northern Periphery Programme 2007-2013 and careful consideration was given to the potential indicators outlined in the SEA Report. Initial drafts of the indicator system included many of the indicators outlined above. A decision was, however, subsequently made to capture this information through a more qualitative indicator system and through programme evaluations. This reflects the aim of developing a simplified set of programme indicators and the difficulty in capturing many of these indicators through the regular monitoring system. The SEA indicators have, nevertheless, been influential during the deliberations over potential indicator systems and will be utilised in the future.