Non-Technical Summary of the Environmental Report (Annex I (j) SEA Directive 2001/42/EC)

The North Sea Region (NSR) has presented a draft programme for the transnational co-operation in the "North Sea Region INTERREG Programme 2007-2013" (the NSR Programme). This non-technical summary contains a summary of the Strategic Environmental Report of the draft NSR Programme.

The environmental report follows the SEA scoping report issued in June 2006, where the environmental issues, objectives and indicators relevant for the environmental assessment are identified. The scoping report was submitted to the national environmental authorities in the countries under the North Sea Region Programme for comments.

1.1 North Sea Programme Context

The North Sea Programme is placed in the context of the EU's Sustainable Development Strategy that aims, in tandem with the Lisbon Strategy for growth and jobs, at a more prosperous, cleaner and fair Europe. Sustainable Development is an overarching concept that represents an integral part of the programme. The EU Treaty requires the integration of sustainable development into all European policies, so they are designed in a balanced and mutually reinforcing way to meet economic, environmental and social objectives.

Aim, objectives and priorities

The overall aim of the NSR programme is to make the North Sea region a better place to live, work and invest in.

The programme has the following four objectives:

- 1. To Increase the overall level of innovation taking place across the North Sea Region,
- 2. To enhance the quality of the environment in the North Sea Region,
- 3. To improve the accessibility of places in the North Sea Region,
- 4. To deliver sustainable and competitive communities.

Four programme priorities have been chosen to focus the programme:

- 1. Building on our capacity for innovation
- 2. Promoting the sustainable management of our environment
- 3. Improving the accessibility of places in the NSR
- 4. Promoting sustainable and competitive communities

To each of the priorities a number of areas for interventions are defined and under each of these areas of intervention a number of examples of cooperation activities are given.

1.2 Environmental Context of the Programme

Sustainable use of natural resources

High levels of material use have broadly stabilised in Western Europe. Over the last two decades, the use of resources has been decoupled from economic growth. But in absolute terms, material use is still high, remaining at levels that were recognised as

unsustainable in the Rio de Janeiro conference. Western European countries have over the past 20 years increasingly imported their raw materials and have in that way "exported" the environmental burden associated with extraction to other parts of the world.

Energy

Total energy consumption and related pressures on the environment fell in Europe in the 1990s but the impact of energy use on climate change appears destined to increase, unless fossil fuels become less dominant and large improvements in energy efficiency are made. The energy sector remains the dominant contributor to climate change. Efficiency and use of renewables (wind, solar power) must be increased, especially if the projected rundown of nuclear power takes place. Emissions of acidifying air pollutants from the energy sector did decrease substantially.

Transport

Transport volume grew at a fast rate in Western Europe, but the sector's contribution to air pollution – except fine dust – was reduced substantially due to the mixture of technological improvements and fleet renewal. On the other hand, the share of the transport sector in the total energy consumption has increased to 30% in Western Europe, and is therefore an important source of greenhouse gas emissions. Also the negative impact of road transport on land and habitat fragmentation, noise and waste is growing. In freight transport, the road share has increased at the expense of rail. Aviation is the fastest growing mode in Western Europe, especially in passenger transport.

Tourism

Tourism is one of Europe's fastest growing sectors and a strong contributor to transport growth. In addition tourism brings further pressures at destination areas through water stress, waste generation and land fragmentation. Policy measures to promote more sustainable tourism are progressing only slowly.

Industry

Western Europe has to a large degree been de-industrialised, but relies on manufactured products from other regions, with a far less advanced and therefore more energy intensive industry sector. The rising import of these products is the main reason for the strong growth in freight transport. However, Western Europe needs to maintain a competitive industrial base. The challenge is to ensure better protection of the environment while achieving this, especially as the more polluting industry sectors (e.g. chemicals) show the strongest growth and the most effective technical improvements have already been taken. Soil contamination from localised sources is often related to closed industrial plants, past industrial accidents and improper industrial waste disposals.

Agriculture

Agriculture intensification and specialisation, stimulated by the common agricultural policy (CAP), have led to soil erosion, water stress and pollution (by chemical fertilisers, pesticides, live stock manure, etc.) and severe declines in biodiversity. The reorientation of the CAP towards agri-environmentalism aims at diminishing these effects.

Forestry

Forestry is not an important economic sector in Western Europe, which increases the opportunity to use forests for nature conservation purposes. However, the condition of forests continues to worsen due to acidification and loss of soil quality.

Fisheries

Many marine fish stocks are below levels that can sustain their populations, due to over fishing by efficient, modernised fleets, despite the considerable reduction in fleet capacity. Inland fish stocks are more under threat from environmental degradation. Aquaculture has grown dramatically in production and hence also in environmental impacts (nutrient status of waters, wild populations).

1.3 Environmental Policy Framework

In order to evaluate the consistency of the NSR Programme with the environmental goals and objectives adopted by the European Union, the following EU environmental policy framework has been used as reference:

- The **Sixth Community Environment Action Programme 2002-2012 (EAP6)**¹. This programme addresses the key environmental objectives and priorities based on an assessment of the state of the environment and of prevailing trends including emerging issues that require a lead from the Community. It is the aim of the programme to promote the integration of environmental concerns in all Community policies and contribute to the achievement of sustainable development throughout the Community.
- The seven Thematic Strategies by the European Commission in accordance with the requirements of the above mentioned EAP6, of which five are already prepared, and two are under preparation

Priorities of the Environment Action Programme 2002-2012

The Environment Action Programme defines the following four priorities, which will be described in detail below:

- 1. Climate change;
- 2. Nature and biodiversity;
- 3. Environment and health and quality of life;
- 4. Natural resources and wastes.

Priority 1: Climate change

Aim: emphasising climate change as an outstanding challenge of the next 10 years and beyond and contributing to the long term objective of stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system, thereby preventing unnatural variations of the earth's climate.

Objectives:

- Ratification and entering into force of the Kyoto Protocol to the United Nations framework convention on climate change and fulfilment of commitments towards reduction in emissions by 2008-2012 compared to 1990 levels for the European Community as a whole;
- Realisation by 2005 of demonstrable progress in achieving the commitments under the Kyoto Protocol;

¹ Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002

• Placing the Community in a credible position to advocate an international agreement on more stringent reduction targets for the second commitment period defined in the Kyoto Protocol.

Actions:

- Implementing international climate commitments including the Kyoto Protocol;
- Reducing greenhouse gas emissions in the energy sector;
- Reducing greenhouse gas emissions in the transport sector;
- Reducing greenhouse gas emissions in industrial production;
- Reducing greenhouse gas emissions in other sectors;
- Using other appropriate instruments (for instance fiscal measures).

Priority 2: Nature and biodiversity

Aim: protecting, conserving, restoring and developing the functioning of natural systems, natural habitats, wild flora and fauna with the aim of halting desertification and the loss of biodiversity, which includes protecting diversity of genetic resources, both in the European Union and on a global scale.

Objectives:

- Halting biodiversity decline with the aim to reach this objective by 2010, including prevention and mitigation of impacts of invasive alien species and genotypes;
- Protection and appropriate restoration of nature and biodiversity from damaging pollution;
- Conservation, appropriate restoration and sustainable use of marine environment, coasts and wetlands;
- Conservation and appropriate restoration of areas of significant landscape values including cultivated as well as sensitive areas;
- Conservation of species and habitats, with special concern to preventing habitat fragmentation;
- Promotion of a sustainable use of the soil, with particular attention to preventing erosion, deterioration, contamination and desertification.

Actions on:

- Biodiversity;
- Accidents and disasters;
- Soil protection;
- Sustainable management of extractive industries;
- Integration of conservation and restoration of landscape values into other policies including tourism;
- Integration of biodiversity considerations in agricultural policies;
- Sustainable use of the seas and conservation of marine ecosystems;
- Forests;
- Genetically modified organisms (GMOs).

Priority 3: Environment and health and quality of life

Aim: contributing to a high level of quality of life and social well being for citizens by providing an environment where the level of pollution does not give rise to harmful effects on human health and the environment and by encouraging a sustainable urban development.

Objectives:

• Achieving better understanding of the threats to environment and human health;

- Contributing to a better quality of life through an integrated approach concentrating on urban areas;
- Aiming to achieve by 2020 that chemicals are only produced and used in ways that do not lead to a significant negative impact on health and the environment;
- Substitution of dangerous chemicals by safer chemicals or safer alternative technologies not entailing the use of chemicals;
- Reducing the impacts of pesticides on human health and the environment;
- Achieving quality levels of ground and surface water without significant negative impacts and risks, and sustainable rates of extraction from water resources;
- Achieving levels of air quality without significant negative impacts and risks;
- Substantially reducing the number of people regularly affected by long-term average levels of (traffic) noise.

Actions on:

- Reinforcement of Community research programmes and scientific expertise;
- Chemicals;
- Pesticides;
- The sustainable use and high quality of water;
- Noise;
- Urban environment.

Priority 4: Natural resources and wastes

Aim: better resource efficiency and resource and waste management to bring about more sustainable production and consumption patterns, thereby decoupling the use of resources and the generation of waste from the rate of economic growth and aiming to ensure that the consumption of renewable and non-renewable resources does not exceed the carrying capacity of the environment.

Objectives:

- Aiming at ensuring that the consumption of resources and their associated impacts do not exceed the carrying capacity of the environment and breaking the linkages between economic growth and resource use;
- Achieving a significant overall reduction in the volumes of waste;
- A significant reduction in the quantity of waste going to disposal;
- Encouraging re-use of waste that is still generated.

Actions:

- Developing a thematic strategy on the sustainable use and management of resources;
- Developing and implementing measures on waste prevention and management;
- Developing a thematic strategy on waste recycling;
- Developing or revising the legislation on waste.

1.4 Environmental Thematic Strategies

Based on the four priorities, the Sixth Environment Action Programme required the European Commission to prepare Thematic Strategies covering the following seven areas:

- 1. Air pollution (adopted 21/09/2005);
- 2. Prevention and recycling of waste (adopted 21/12/2005);
- 3. Protection and conservation of the marine environment (adopted 24/10/2005);
- 4. Soil (in progress);
- 5. Sustainable use of pesticides (in progress);

- 6. Sustainable use of resources (adopted 21/12/2005);
- 7. Urban environment (adopted 11/01/2006).

These Thematic Strategies work with themes rather than with specific pollutants of economic activities. They take a more long-term perspective in setting clear environmental objectives to around 2020, thereby providing a stable policy framework. Finally, they focus on identifying the most appropriate instruments to deliver European policy goals in the least burdensome and most cost effective way possible. These strategies are often cross-cutting (especially the one on urban environment), and synergies with other policies of other sectors are vital. The operational programme stresses that the aim of the programme is to be reached by sustaining and ensuring the acknowledged environmental qualities of the region.

One of the objectives of the programme emphasise the need to enhance the quality of the environment in the region and another emphasise sustainability and communities.

This focus on environment and sustainability indicates that the programme is drafted under the auspices of and, furthermore, during its implementation is required to take environmental considerations into account when granting support to applications.

Since the second priority - promoting the sustainable management of our environment - and the fourth - promoting sustainable and competitive communities emphasise sustainability and the environment, it again indicates that projects to be supported under these priorities should have at least a neutral environmental impact or - preferably - a positive environmental impact. In general, the programme seeks to ensure that environmental issues should be considered carefully - and to the extent possible - be mitigated when identified.

The first priority - *building on our capacity for innovation* - does not give any explicit directions for support of projects that may allow an assessment of their potential significant environmental impacts.

Projects to be supported under the third priority - *Improving the accessibility of places in the North Sea Region* might have a positive environmental impact on some parameters (e.g. air, noise and climate), if they are aimed at strengthening alternatives to road transport. Such projects may also have negative impacts on other parameters e.g. the marine environment if they result in an increase of sea transport. Furthermore, they might have a negative impact on biodiversity and land-use if they give rise to an overall increase in the transport volume.

1.5 Assessment of the likely significant influence on the relevant environmental issues

All the proposed areas of intervention under the *first priority -Building innovation capacity of businesses and services* - can be characterised as process designs aiming at ameliorating/changing processes and/or working modes of different societal segments in specified directions. Basically, it is not possible to identify the likely significant environmental impacts for these types of activities - by the simple fact that such processes may or may not be adopted - and may or may not work as intended. An environmental assessment of these initiatives may only meaningfully be carried out at the stage when possible specific downstream activities are formulated The proposed areas of intervention under *priority two* - *The sustainable management* of our environment- and priority three - improving the accessibility of places in the North Sea - as well as priority four - Promoting sustainable and competitive communities- can all be assessed based on the examples of cooperation activities.

None of the areas of intervention are, however, described sufficiently detailed to allow a quantitative assessment. All assessments are qualitative - of whether the significant environmental impact is likely to be positive, neutral or negative.

1.5.1 Selection criteria for the proposed activities

Since specific selection criteria for proposed activities are not included in the Draft Operational Programme, it is not possible to assess the likely significant environmental effects at this level. This will only be possible in future downstream decision-making processes through which specific projects are formulated. This calls for a procedure to ensure the assessment of the likely significant environmental impact of the specific projects before funding is granted under the programme.

1.5.2 Outline of the reasons for selecting the alternatives dealt with

The possible positive environmental impacts that have been identified from some of the areas of intervention formed the basis for selecting alternatives to the programme as proposed. Consequently, not adopting the North Sea Region Programme has been considered as an alternative of which the implication would be that the identified positive impacts would not be achieved if support is not given as specified in the operational programme.

The specific assessment of each area of intervention on the issues, which have been identified as relevant in the scoping report is reported on in the full evaluation report.

This assessment is summarised and discussed for which types of projects positive and negative environmental impacts respectively can be expected for each of the environmental issues identified as relevant in the scoping report. This summary can also be characterised as the overall effects of the areas of intervention on each of the identified environmental issues.

The fact that it has mainly been possible to identify potential positive impacts on the identified environmental factors and a positive support to the objectives formulated in the 6th Environmental Action programme and the thematic strategies does not mean that potential negative environmental impact are excluded from the programme. Only through the application of a downstream assessment procedure of the specific projects and measures to be supported, such negative significant environmental impacts may be identified, excluded and/or mitigated through the decision-making procedure.

In order to provide for such downstream assessment a procedure for assessing potential environmental impacts from applications for support is proposed in the environmental report.

1.6 Response measures to adverse effects

It will be important when preparing the evaluations to include a requirement for the evaluation on assessing the significant effects of activities and projects on the relevant environmental objectives. A requirement should also be included to propose

corrective measures if the evaluation shows unexpected adverse environmental effects.

In order to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the programme, measures should be envisaged for the implementation of the Programme in the following ways:

- [1] In the formulation of selection criteria: All relevant recommendations will be taken into account when finalising the set of selection criteria for the assessment of project proposals.
- [2] In the monitoring of project implementation: The likely environmental effects of project activities will form part of the overall continuous project monitoring methodology.

1.7 Monitoring of the significant environmental impacts

The monitoring of the environmental impacts should be an integrated part of the evaluation activities of the North Sea Programme 2007-2013.

Measures decided concerning monitoring are laid down in chapter 5 of the Operational Programme concerning the role and composition of the Joint Monitoring Committee in reference to Articles 63, 64, 65 of the General Regulations. Existing monitoring arrangements are employed and specific provisions for monitoring. These specific provisions concerning monitoring of the environmental effects should be carried out on the basis of systematically collected information on likely environmental effects via the implementation of projects as proposed in Appendix 2 of the Final Environmental report (separate document).

As part of the Programme evaluations in line with Articles 47 and 48 of the General Regulations and the provisions laid down in the Operational Programme on Evaluation (chapter 5), likely significant environmental effects should be assessed. This ensures that appropriate remedial actions can be undertaken if the evaluation reveals unintended adverse environmental effects.

The following indicators are suggested in relation to the environmental issues identified in the SEA. Where relevant, the indicators build on the core indicators for ERDF and Cohesion Fund as listed in the Indicative Guidelines on Evaluation Methods: monitoring and Evaluation Indicators, Working Document No. 2, developed for the new programming period 2007 - 2013, by the EU Commission, DG Regional Policy.

Environmental issues as identified	Proposed indicators
Biodiversity, flora and fauna	Amount of nature 2000 areas affected by the programme
Air and climate factors	Reduction in greenhouse gas emissions (CO ₂ equivalents
Landscape	No of projects having significant impact on landscape
Energy and use of renewable resources	Additional capacity of renewable energy production (MWh)
Adaptation to climate change	No of projects focusing on responses to severe weather conditions

Proposed indicators