

INTERREG Baltic Sea Region Programme
Secretariat

Ex Ante Evaluation and Strategic Environmental Assessment

Draft environmental report

July 2006

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Objective 3 Baltic Sea Programme 2007-2013

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1 Non technical summary

The Baltic Sea Region (BSR) has presented a draft programme for the transnational co-operation in the "Baltic Sea Region Interreg Programme 2007-2013" (the BSR Programme). This report is an environmental assessment of the draft BSR Programme.

The environmental context in which the BSR Programme is proposed for implementation is briefly described in the report on the basis of the Kiev Report from 2003, describing the major features of the European environment. The Environmental Policy Context in which the BSR Programme is proposed is also described in this report. This environmental assessment is based on the requirements in the SEA Directive requiring that national and interregional plans and programmes are assessed prior to their adoption

The likely significant environmental impacts of the Baltic Sea Programme 2007-2013 are assessed at three levels:

1. Assessment of the aim, objectives and priorities
2. Assessment of the directions for support given in the text describing each of the priorities
3. Selection criteria for the proposed activities

This report assesses, as described below, the two first levels of the BSR Programme, even though the abstract and non-substantial nature of the BSR Programme makes it difficult to carry out an effective assessment. The third level of assessment cannot be carried out until a further refinement of proposed initiatives has taken place. Therefore, the report recommends guidelines for the environmental assessment of project applications.

This focus on sustainability and environment indicates that the impact on the environment should be considered carefully during the implementation of the programme. This is also the case for the majority of the priorities proposed

It is not possible to say to which extent the overall environmental impact of the programme will be influenced by the projects supported under the three priorities, as there are no directions yet on how the available funds will be distributed among the three priorities.

It has only been possible to identify relevant environmental issues and criteria to be considered in the environmental assessment for a limited number of the directions for support given in the text under each priority area. There are two reasons for this:

- The **characteristics** of the directions for support.
- The **level of detail** in the description of the directions for support

More than half of the directions for support relate to activities which can be characterised as process designs aiming at 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 this type of activities. An environmental assessment of these initiatives may only meaningfully be carried out when possible specific downstream activities are formulated

The remaining part of the directions for support relate to what can be called project design, where it, in principle, will be possible to assess the likely environmental impacts. However, this requires a certain level of details in the description of the directions for the activities. Only around half of the directions of activities relating to project designs are described sufficiently detailed to assess their likely significant environmental effects.

None of the directions for support are described sufficiently detailed to give a quantitative assessment. All assessments are qualitative assessing if the impact is likely to be positive, neutral or negative.

All the directions for support it has been possible to show, with a few exceptions, a positive impact on the relevant environmental issues.

2 Introduction

The environmental assessment of the Baltic Sea Programme 2007-2013 presented in this environmental report is prepared based on the Draft Operational Programme version 2, dated 3. July 2006.

The environmental report follows the SEA scoping report issued in June 2006, where the environmental issues, objectives and indicators relevant for the environmental assessment were identified. The scoping report was submitted to the national environmental authorities in the countries under the Baltic Sea Region Programme for comments. Very few comments were received and to the extent possible the received comments have been accommodated by the inclusion of the following items:

- An environmental baseline description based on the latest report on the status of the environment in Europe
- brief account of the EU Environmental Policy Framework
- an assessment of the relevance and consistency of the proposed BSR Programme to the EU Environmental Policy Framework

The report is structured in the following way:

A brief description of the context and contents of the proposed BSR Programme, and a description of the Environmental Context in which the BSR Programme is proposed for implementation is presented in chapter 3.

A description of the relevant EU Environmental Policy Framework is presented in chapter 4.

A description of the approach and methodology employed in the environmental assessment is presented in chapter 5.

A description of the details in the environmental assessment is presented in chapters 6 and 7.

Finally, there are three appendices containing further details to chapters 6 and 7 are attached to the report.

3 Overall development context of the BSR Programme

The Baltic Sea Region Programme is developed in the context of the EU's Sustainable Development Strategy that aims, in tandem with the Lisbon Strategy for growth and jobs, for 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.

3.1 Objectives and priorities

The overall objective of the BSR programme is:

To strengthen the competitiveness of the Baltic Sea Region, its territorial cohesion and sustainability of its development by connecting potentials over the administrative borders.

The programme is thematically focused on four priorities:

1. Facilitate the generation and diffusion of innovation across the BSR
2. Improving the external and internal accessibility of the Baltic Sea Region
3. Managing the Baltic Sea as a common resource.
4. Promoting attractive and competitive cities and regions

3.2 Environmental context of the BSR programme

The following description of the environmental context to the BSR programme is based on Europe's Third Environmental Assessment Report (the so-called Kiev Report, 2003). The Kiev rapport is the most recent overview of the status of the environment in Europe. It is based on data that are approximately 5 years old.

Environmental policies, when properly developed and implemented, have in several fields led to significant improvements in and reduced pressures on Europe's environment:

- substantial reductions in emissions of substances that deplete the ozone layer;
- improvements in air quality as a result of reduction of air emissions;
- improved water quality as a result of reductions in point source emissions to water;
- improved protection of biodiversity through the designation and protection of habitats.

This progress was realised mainly through “traditional” measures regulating products and production processes, and protecting important nature sites. In waste management, environmental policies have not led to significant overall reduction of use of natural resources so far, because improvements in waste prevention and recycling were neutralised by an increase in total waste volume related to the general economic growth.

Marked economic and social transition since the pan-European process began has resulted in environmental improvements in some areas. The ongoing transition of Eastern Europe from a manufacturing and agricultural society to a more service-oriented society has led to overall reductions in emissions of greenhouse gases. Urban development and transport infrastructure is sealing soil and fragmenting habitats in many places. The exploitation of living marine resources is threatening marine natural resources in general. Because of the link with economic growth, progress is unlikely to be sustained and many negative impacts, e.g. in the transport field, are likely to be exacerbated.

The implementation of more integrated approaches to policy making needs to be accelerated if Europe is to ensure proper protection of the environment and meet its aspirations on sector integration and sustainable development: not only regulatory measures to deal with specific environmental problems, but also economic and other instruments to deal with the environmental impacts of sector activities.

3.2.1 Economic development and related pressures on the environment

Sustainable use of natural resources

The use of natural resources across the Baltic Sea Region constitutes a diverse picture. High levels of material use have broadly stabilised in the Western part of the region, whereas the corresponding use of materials in the Eastern part of the region is still in the rise.

Over the last two decades, the use of resources has been decoupled from economic growth in the western part of the region, whereas this is not the case in the eastern part of the region.

Energy

Total energy consumption and related pressures on the environment fell in Europe in the 1990s whereas 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. Energy efficiency has improved in all regions, but especially in Central and Eastern Europe, as a result of a combination of positive measures and economic restructuring. The energy sector remains the dominant contributor to climate change. Increasing the efficiency and use of renewables (wind, solar power) is a must, especially if the expected decrease in nuclear power's share of the total energy generation take place.

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. In Eastern Europe the share of the transport sector in the total energy consumption has increased after a sharp decay in the early 1990'es. Transport patterns in Central and Eastern Europe are currently more sustainable than in Western Europe but are moving in the wrong direction. An overall assessment of the environmental and other impacts of transport is needed as the basis for developing an integrated suite of policy measures covering regulation, investment, taxes and other instruments. The transport sector is 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 and sea. 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 and do not seem to address all relevant issues causing environmental degradation.

Industry

Western European economy is in the transition from an industrial production mode as the general characteristic towards a more service-oriented economy. Western Europe relies on manufactured products from other regions, with a far less advanced and therefore resource demanding industry sector. The rising import of these products is the main reason for of the strong growth in freight transport. Eastern Europe is still at the beginning of this transition where a mixture of old resource in-effective industries are gradually being phased out while a growing service sector is beginning to show

Whereas most point source-pollution from industry is controlled by regulation in Western Europe the implementation of these regulations are still in process

in Eastern Europe. In Western Europe soil contamination from localised sources related to closed industrial plants, past industrial accidents and improper industrial waste disposals has become a problem.

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, life stock manure, etc) and severe declines in biodiversity in Western Europe. The reorientation of the CAP towards agri-environmentalism is intended to minimise these effects, but still without major achievements. Despite different conditions specialisation and intensification of farming are common trends across the region, associated with significant environmental pressures in practically all countries. In Eastern Europe agriculture is still inefficient compared to Western Europe but the introduction of intensification methods is expected to bring the sector forward. The CAP is expected to speed up the development of the agricultural sector in Eastern Europe with the probable loss of biodiversity as one of the secure effects of this development.

Forestry

The economic scale of forestry in Europe is generally small, but significant in most countries bordering the Baltic Sea. Approximately 80 % of European forest resources lie in Russia. However, the condition of forests continues to worsen due to acidification and loss of soil quality.

Since monitoring commenced in the mid-eighties, forest condition has generally declined and more than 20 % of trees are now classified as damaged. The relatively low level of exploitation of Europe's timber resources provides opportunities for policy makers and forest managers to diversify the functions of forests and move to a better balance of environmental, social and economic interests in forest areas. However, fragmented ownership following privatisation and restitution in countries with economies in transition may be a barrier to proper management practices and hence environmental protection.

Fisheries

Many marine fish stocks are below levels that can sustain their populations, due to overfishing 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, especially marine aquaculture in western Europe and reached a total production just over 2 million tonnes in 2000. The main environmental concerns relate to the intensive cultivation of salmon, sea bass and sea bream in marine waters and trout in freshwater.

3.2.2 Environmental developments

Climate change

Climate change – which is projected to be smaller in North Western Europe than in Eastern or Southern Europe – is considered to be partly responsible for the increased risk of floods in certain areas and droughts in other. At the current rate, Western Europe will be far short of its Kyoto targets for greenhouse gas emissions, but the costs of climate mitigation could be reduced significantly through the use of the Kyoto mechanisms (market for greenhouse gas allowances). But the Kyoto Protocol is only the first step towards “sustainable” greenhouse gas concentrations and climate conditions.

Significant reductions in greenhouse gas emissions occurred during the 1990s, ranging from 3.5 % in the EU, to 34 % in CEE. However, projections based on existing domestic and EU policies and measures indicate that emissions in the EU will have fallen by only 4.7 % in 2010, 3.3 percentage points short of the Kyoto target of 8 %.

Stratospheric ozone depletion

There is a gradual fall in the concentration of chlorine-contaminating ozone-depleting substances in the troposphere, but increased ultraviolet radiation will continue and its damaging effects on human health and ecosystems are likely to persist for a considerable time.

Air pollution

Air pollution remains a problem in most cities. Although, concentrations have been falling since monitoring began, a significant proportion of the urban population experiences concentrations above future EU limit values. Pollution by sulphur dioxide (SO₂) and to a lesser extent nitrogen oxides (NO_x) has been reduced significantly in Western Europe. Ground-level ozone and particulate matter (PM) are, however, still issues for concern for human health and effects on ecosystems. While air quality is also improving in Central and Eastern Europe and EECCA, especially the latter still have problems with sulphur dioxide and nitrogen oxides.

Exposure to particular matter (fine dust), mostly caused by diesel car engines, has become the largest potential health problem related to air pollution in most cities. Eutrophication remains a substantial problem with large unprotected ecosystem areas. On the other hand, pollution by SO₂ and (to a lesser extent) NO_x, has been reduced significantly in Western Europe. The reduction of greenhouse gas emissions to comply with the Kyoto Protocol is expected to have significant co-benefits on air quality in general.

Chemicals

Although concentrations of hazardous chemicals in the environment have decreased considerably, there remain a number of substances where target levels are still exceeded, e.g. dioxins and mercury in fish. Only a few selected heavy metals, persistent organic pollutants and pesticides are frequently monitored

and there is a general lack of reliable data, while the chemical and pharmaceutical industry have grown faster than other industrial sectors in Western Europe.

There are some chemical problems specific to the Central and Eastern Europe countries. These include the large quantities of old and out-dated pesticides (some of which are persistent organic pollutants) that are known to be stock-piled. Storage facilities for these chemicals are frequently inadequate, ranging from simple holes in the ground and open sheds in fields to decomposing concrete bunkers

Waste

Waste is a major issue in every European country and waste quantities are generally growing. The generation of waste reflects a loss of materials and energy and imposes economic and increasing environmental costs on society for its collection, treatment and disposal. Total waste generation has only been decoupled from economic growth by increased prevention and re-use in a few countries. Nuclear power is responsible for a steady accumulation of highly radioactive waste. In some countries, waste is dominantly disposed by incineration, in some others the dominant disposal method is land-filling. Recycling initiatives are steadily growing in all countries involved, some countries being more ahead than others in this respect.

Water

Water resources in many areas of Europe are under threat from a range of human activities. Drinking water quality is still a concern throughout Europe. The health of humans and ecosystems is still threatened by water contaminated by organic and inorganic pollutants such as pesticides and heavy metals. In Western Europe river, lake and coastal water quality, in terms of phosphorus and organic matter, is generally improving, resulting mainly from improved wastewater treatment, and heavy metal concentrations in river and marine waters have fallen. But nitrate levels have remained high in Western Europe due to intensive agriculture production, and eutrophication remains a problem near river mouths or big cities.

Illegal discharges, mainly from ships, are still a problem, especially in the North Sea and Baltic Sea.

Soil

Major soil issues in Europe are irreversible losses due to soil sealing and erosion (mainly caused by unsustainable cultivation practices), continuing contamination from local and diffuse sources (including acidification), salinisation and compaction. Pressures result from high concentrations of population and economic activities (increase of built-up area, soil pollution), and changes in climate and land use. Consumer behaviour and the industrial sector are contributing to the increase of potential sources of contamination such as municipal waste disposal, energy production and transport, mainly in urban areas.

Technological and natural hazards

Technological hazards (e.g. shipwrecking, accidents in industry) and natural hazards (e.g. flooding) will continue to occur throughout Europe. A structured and systematic approach to hazard management (better prevention and emergency planning) should lead to a reduction in the number and consequences of technological accidents and reduce the impacts of some natural disasters.

Biodiversity

In addition to a responsibility to reduce its “ecological footprint” on the rest of the world, Europe has a global responsibility to preserve the character of its varied ecosystems and landscapes, and to conserve the migratory species that cross the continent and the threatened species that it hosts. Species population trends are mixed: some previously threatened species are starting to recover, while others continue to decline at alarming rates, generally as a result of the disappearance or degradation of their habitats. The number and total size of protected areas has increased considerably since the 1970s in Western Europe, but is not likely to increase much further, because increasing land-use pressures from transport, urbanisation and intensive agriculture are diminishing the remaining “protectable” semi-natural remote areas. Existing protected sites are facing similar land-use pressures.

One recognized global biodiversity prime region are partly located in the Baltic Sea Region - namely the Arctic area.

Human health

In Europe there has been evidence of health threatening substances (dioxines, PCBs, etc) in food and livestock feedstuffs. Changes in the environment and other factors of modern life are likely to play a significant role in the risk to human health. But so far there is little knowledge of the (direct) health consequences of climate change and hazardous chemicals in the environment. Because the increase in traffic intensity largely rules out the technological and infrastructural progress which has been made, transport continues to be a significant contributor to health effects (air pollution, noise, accidents).

4 Environmental Policy Framework

4.1 Introduction

In order to evaluate the consistency of the BSR Programme with the environmental goals and objectives adopted by the European Union, the following EU environmental policy framework will be 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

4.2 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.

4.2.1 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

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

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;
- 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).

4.2.2 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).

4.2.3 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.

4.2.4 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.

4.3 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.

4.3.1 Air pollution

This theme (mainly) falls under Priority 3 of EAP6 (“Environment and health and quality of life”). The thematic strategy (adopted 21/09/2005) sets health and environmental objectives and emission reduction targets for the main pollutants. In order to achieve the specified objectives by 2020, there should be a reduction relative to the emissions of 2000 of:

- SO₂: -82%;
- NO_x: -60%;
- VOCs: -51%;
- ammonia: -27%;
- primary PM_{2.5}: -59%.

Actions:

- making environment legislation work better: simplification of air quality legislation; revision of the National Emission Ceiling Directive; coherence with other environment policies;
- integrating air quality concerns into other policy areas: energy, transport, agriculture, Structural Funds, including the international dimension (for instance USA, China).

4.3.2 Prevention and recycling of waste

This theme (mainly) falls under Priority 4 of EAP6 (“Natural resources and wastes”). The long-term goal of the thematic strategy (adopted 21/12/2005) is for the EU to become a recycling society, which seeks to decrease the amounts of waste and uses the remaining waste as a resource. With high environmental reference standards in place the internal market will facilitate recycling and recovery activities. The impact of the proposed changes should be:

- less waste to landfill;
- more compost and energy recovery from waste;
- more and better recycling.

Actions:

- a renewed emphasis on full implementation of existing legislation;
- simplification and modernisation of existing legislation;

- introduction of life-cycle thinking into waste policy;
- promotion of more ambitious waste prevention policies;
- increased focus on knowledge and information;
- development of common reference standards for recycling;
- further elaboration of the EU's recycling policy.

4.3.3 Protection and conservation of the marine environment

This theme (mainly) falls under Priority 2 of EAP6 ("Nature and biodiversity"). The objective of the thematic strategy (adopted 24/10/2005) is to protect and restore Europe's oceans and seas and ensure that human activities are carried out in a sustainable manner so that current and future generations can enjoy and benefit from biologically diverse and dynamic oceans and seas that are clean, safe, healthy and productive. A framework for enhanced cooperation – legally binding but respecting subsidiarity – should ensure:

- a high level of protection for Europe's oceans and seas;
- an improved knowledge base to improve policy making;
- integrated and cost-effective actions to reduce pressures;
- effective monitoring and assessment to make sure goals are achieved and actions deliver results.

4.3.4 Soil Protection

This theme (mainly) falls under Priority 2 of EAP6 ("Nature and biodiversity"). The thematic strategy (in progress) should set qualitative and quantitative objectives and the means to achieve them, in order to:

- put an end to the accumulation in soil of substances which pose an environmental and health hazard;
- reverse the alarming trend towards erosion, compaction and sealing, the removal and contamination of soil;
- protect soil in its role in storing CO₂, securing water resources and preserving biodiversity;
- protect soil for the sustainable production of food and renewable resources.

4.3.5 Sustainable use of pesticides

This theme (mainly) falls under Priority 3 of EAP6 ("Environment and health and quality of life"). The thematic strategy (in progress) sets out its objectives as follows:

- to minimise the hazards and risks to health and environment from the use of pesticides;
- to improve controls on the use and distribution of pesticides;
- to reduce the levels of harmful active substances, in particular by replacing the most dangerous by safer (including non-chemical) alternatives;

- to encourage the use of low-input or pesticide-free crop farming;
- to establish a transparent system for reporting and monitoring progress including the development of appropriate indicators.

4.3.6 Sustainable use of natural resources

This theme falls (mainly) under Priority 4 of EAP6 (“Natural resources and wastes”). The overall objective of the thematic strategy (adopted 21/12/2005) is to reduce the negative environmental impacts generated by the use of natural resources in a growing economy, a concept referred to as “decoupling”.

Actions:

- improve our understanding and knowledge of European resource use, its negative environmental impact and significance in the EU and globally;
- develop tools to monitor and report progress in the EU and its Member States and economic sectors;
- foster the application of strategic approaches and processes both in economic sectors and in the member states and encourage them to develop related plans and programmes;
- raise awareness among stakeholders and citizens of the significant negative environmental impact of resource use.

4.3.7 Urban development

This theme falls under Priority 2 of EAP6 (“Environment and health and quality of life”). The measures offered under the thematic strategy (adopted 11/01/2006) aim to contribute to a better implementation of existing EU environment policies and legislation at the local level by supporting and encouraging local authorities to adopt a more integrated approach to urban management and by inviting Member States to support this process and exploit the opportunities offered at EU level. If implemented at all levels, the strategy will ultimately contribute to improve the quality of the urban environment, making cities more attractive and healthier places to live, work and invest in, and reduce the adverse environmental impact of cities on the wider environment.

Actions:

- guidance on integrated environmental management;
- guidance on sustainable urban transport plans;
- support for EU wide exchange of best practices;
- a Commission Internet Portal for Local Authorities;
- training; drawing on other Community Support Programmes (cohesion policy, research).

5 Assessment of the likely significant environmental effects

5.1 Introduction

The assessment of the likely significant impacts of the proposed BSR Programme falls in three principal parts:

- an assessment of the relevance and consistency of proposed measures to the EU Environmental Policy Framework (described in chapter 4)
- an assessment of the environmental impacts of the proposed measures
- Selection criteria for the proposed activities

The third tier of the assessment cannot be carried out at this stage of assessment, and is therefore not included in this report. The third tier has been proposed because the nature and direction of possible significant environmental impacts are not known at this stage due to the rather abstract character of proposed measures. It is important to emphasize that the rather abstract character of proposed measures is not taken as a failure in programming but is rather seen as an inherent part of how such programmes are/should be developed.

It is proposed that downstream activities flowing from the rather abstractly described proposals/measures are screened in relation to their possible significant environmental impacts for the purpose of ensuring that environmental considerations are integrated in the implementation of the programme. This screening mechanism is described in chapter 7 of this report.

5.2 Approach and methodology applied in assessment

According to the Handbook on SEA for Cohesion Policy 2007-2013² (the Handbook) the SEA must include the following three levels of the programme:

- Level one: Development objectives

² Greening Regional Development Programmes Network: "Handbook on SEA for Cohesion Policy 2007-2013" February 2006

- Level two: Measures and eligible activities
- Level three: Selection criteria for the proposed activities

5.3 Level one: Development objectives

The environmental impacts to be identified at this level are the environmental implications of overall directions given by aim, objectives and priorities specified in the Draft Operational Programme.

5.4 Level two: Measures and eligible activities

As the Draft Operational Programme does not specify eligible activities, an important part of the scoping process has been to "decompose" the programme in order to identify directions for support. Thus, as the term *directions for support* is widely used in the environmental report it should be stressed that the term is not used in the Draft Operational Report but derived from the decomposition of the programme in the scoping report.

The directions for support identified under each heading in the Draft Operational Programme has in the scoping report been examined in relation to which environmental issues and objectives it might be relevant to consider in the environmental assessment as well as which environmental criteria to apply in the assessment.

This examination showed that it was only possible to identify relevant environmental issues and criteria to be considered in the environmental assessment for a limited number of the directions for support. There are two reasons for this:

- The **characteristics** of the directions for support.
- The **level of detail** in the description of the directions for support

More than half of the directions for support relate to activities which can be characterised as process designs aiming at 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 this type of activities. An environmental assessment of these initiatives may only meaningfully be carried out when possible specific downstream activities are formulated

The remaining part of the directions for support relate to what can be called project design, where it, in principle, will be possible to assess the likely environmental impacts. However, this requires a certain level of details in the description of the directions for the activities. Only around half of the directions of activities relating to project designs are described sufficiently detailed to assess the likely significant environmental effects.

None of the directions for support are described sufficiently detailed to provide a basis for a quantitative assessment. All assessments are qualitative assessing if the impact is likely to be positive, neutral or negative.

Assessments are based on expert judgements and on experiences in assessing environmental impacts at this level of planning/programming.

5.5 Level three: Selection criteria for the proposed activities

As 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 downstream, when the specific projects are formulated. This calls for a procedure to make an assessment of the likely significant environmental impact of the specific projects before funding is granted under the programme. A proposal for such a procedure is included in chapter 7 in this environmental report.

6 Assessment of the likely significant impacts

As mentioned in the above chapter the assessment carried out in this report has been divided into two tiers.

The first tier is an assessment of the relevance and consistency of the proposed programme to the EU Environmental Policy Framework. This assessment is located in appendix 1 - below.

The second tier is an assessment of the likely significant impacts of the proposed measures on the key environmental factors. This assessment is located in appendix 2 - below.

The following sections of this chapter give a broad introduction to the understanding of the environmental impacts as they are assessed in appendix 2 - below. Where the term N/A - not applicable - is used in appendix 2 it covers the meaning that it is not possible to append any impact and/or direction of any possible impact to the proposed measure.

6.1 Assessment of the aim, objectives, and priorities - an overall comment.

The aim and the objectives of the programme emphasise sustainable development as an intrinsic part of the programmes objectives. This indicates that the programme in principle is drafted under due consideration to the possible environmental impacts flowing from the proposed programme initiatives.

The second and third priorities - Managing our environment wisely / External and internal accessibility of the BSR , and Managing the Baltic Sea as a common resource - focus on environmental management explicitly, this indicates that projects supported under these priorities are supposed to be designed as having a positive environmental impact or at least that environmental issues should be considered carefully.

The second priority - Managing our environment wisely/External and internal accessibility of the BSR - does not give any explicit directions for support of projects in relation to their potential environmental impacts. Projects might have a positive environmental impact on some parameters (e.g. air, noise and

climate), if they e.g. aim at strengthening alternatives to road transport. Such projects might have negative impacts on other parameters e.g. biodiversity and land-use if they focus on new infrastructure.

However, there are also potentials for negative environmental impacts if e.g. support is given to infrastructure projects which will increase the overall transport volume and especially if they provide basis for increasing road transport.

It is not possible to say to which extent the overall environmental impact of the programme will be influenced by the projects supported under one priority may influence projects supported under another priority, as there are no directions yet on how the available funds will be distributed between the four priorities.

6.2 Assessment of directions for support

The specific assessment of each of the directions for support is reported in the table in appendix 2. This assessment is summarised below where it is discussed for which types of projects positive and negative environmental impacts respectively have been identified for each of the environmental issues. This summary can also be characterised as the **cumulative effects** of the directions for support on each of the identified environmental issues.

6.2.1 Biodiversity, flora and fauna

A number of potential projects to be supported may have impact on biodiversity, flora and fauna. All kinds of infrastructure projects and most projects promoting tourism are likely to have an impact. However, only very few of the directions for support are sufficiently detailed described to provide basis for an assessment of what the impacts are likely to be.

Few directions for activities are identified where a positive environmental impact on biodiversity, flora and fauna can be expected, including:

- actions to support the upgrading of the urban environment and public realm including urban renewal and brownfield development.
- measures aiming at reducing risks posed to nature by climate change
- measures focusing at improving maritime safety and security.

No directions for activities are identified to have unambiguous negatively impact on biodiversity and flora and fauna.

6.2.2 Population and human health

A large number of projects may have indirect influence on the population and on human health including projects influencing most of the other environmental issues like soil, water and air. None of the directions for activities addresses population and human health directly.

6.2.3 Soil/ Land use

Projects supporting the construction of new infrastructure are assessed to have a negative impact on land use. No directions for activities are assessed to have direct impact on soil quality

6.2.4 Water

Measures focusing on maritime safety and security are assessed to have a potentially positive impact on water

6.2.5 Air and Climatic factors

A number of directions for activities are assessed to have potential positive impact on air and climate factors including:

- actions promoting renewable energy
- actions promoting a "lower carbon economy"
- measures reducing transport volumes

No directions for activities are identified to have unambiguous negatively impact on air and climate factors

6.2.6 Material assets

The only directions for activities identified with direct potential impact on material assets are measures aiming at reducing risks posed to property by climate change.

6.2.7 Cultural heritage

One of the headings under priority one relates to regional identity and cultural heritage. The directions for support under this heading emphasize that the natural and cultural heritage shall be utilised as an opportunity to exploit potentials for the development of strategies for sustainable tourism. If the activities will increase the tourism in sensitive areas, it is likely that these activities will have a negative impact on cultural heritage. If the activities will make existing tourism more sustainable without increasing the total volume it is likely to have a positive impact.

6.2.8 Landscape

A large number of the directions for activities are assessed to have an impact on landscape. Projects supporting the construction of new infrastructure and projects supporting increases tourism in sensitive areas are assessed to have a potential negative impact. Support to projects aiming at reducing risks posed to landscapes by climate change is assessed to have a positive impact.

6.2.9 Energy and use of renewable resources

There is a specific heading on under one priority focusing on energy. Under another priority there is a heading on "lower carbon economy". All directions for support under these headings are assessed to have a positive impact on energy efficiency and the potentials for renewable energy

6.2.10 Transport demand

All activities promoting tourism is deemed to have an impact on transport - with a presumed increase in the overall volume of tourism. If accessibility is improved through construction of new transport infrastructure it is likely to increase the transport demand in general. If this development is not off-set in an environmentally friendly manner, then the growth in transport related environmental degradation is likely to be reinforced by the implementation of the proposed measures.

6.2.11 Adaptation to climate change

There is a heading on climate change under the first priority focusing on promotion of innovative and sustainable building design and concepts for multi-functional land use and other solutions responding to severe weather conditions. It is assessed that these activities will have a positive impact in relation to adoption to climate changes.

6.3 Summary of the cumulative effects

With a few exceptions all the relevant environmental issues will be positively impacted by the analysed directions for support. The only issues where potential negative impacts are identified are land use, land take and transport demand.

However, this does **not** mean that the possibility of negative environmental impact from the programme on other issues can be excluded. As discussed above, it has only been possible to analyse a limited number of the directions for support due to the character of the directions and/or the level of detail in the description of the directions.

As also discussed above, the two priorities - 2 and 3 - emphasise sustainability and wise management of the environment respectively which indicates that environmental issues should be considered carefully. The second priority on accessibility might open for support to projects leading to increase in the overall traffic volume.

6.4 Possible effects on the identified environmental objectives

The scoping report identified environmental protection objectives for all the examined environmental issues. For some of the environmental issues protec-

tion objectives are formulated at regional level (EU, Lisbon, HELCOM) as well at national level in one or more of the countries relevant for the Baltic Sea programme. For other environmental issues objectives are either formulated at regional level or at national level in one or more countries.

At this stage of the SEA, it will not be meaningful to assess how each of the identified environmental protection objectives will be affected as no firm conclusions can be made on the likely environmental impact on the environmental issues cf. section 6.3 above. The effects on the relevant environmental protection objectives will have to be assessed for each project applying for support under the programme. A procedure for how this can be done is proposed below.

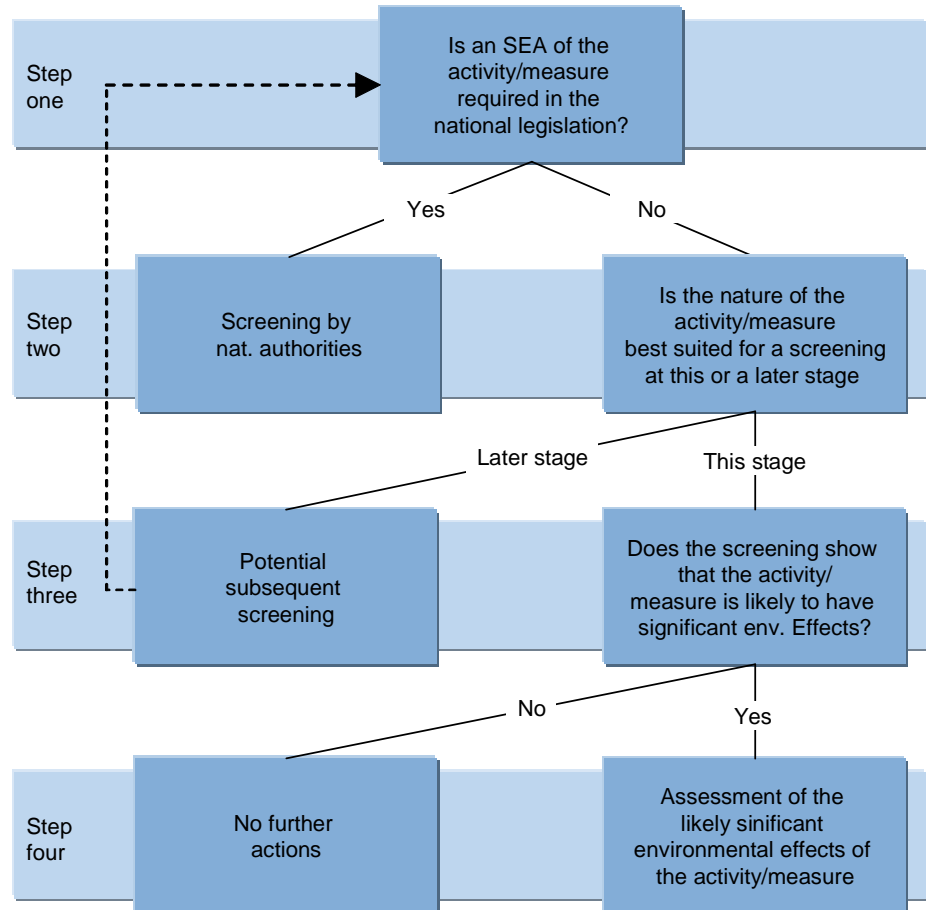
7 Proposed guidelines for environmental assessment of project applications

As discussed above, it has only been possible to assess the likely environmental impacts of a limited part of the programme. Where an assessment has been possible it has only been possible to give an overall qualitative assessment indicating if the effects on the identified environmental issues are likely to be positive, negative or neutral.

In order to ensure that the programme will not have any unintentional environmental effects, it is proposed that the likely environmental effects of all proposed activities/measures are screened. If this screening shows that the proposed activity/measure is likely to have significant environmental effects, these should be assessed before support from the programme is granted.

As shown in Figure 7.1, the screening procedure is proposed to include four steps.

Figure 7.1 Screening procedure



7.1 Step one

The SEA directive requires that an SEA is carried out by the national authorities for plans and programmes which are subject to a preparation and/or adoption by an authority at national, regional or local level, including those co-financed by the European Community. If an activity/measure to be implemented as an outcome of the Baltic Sea Programme is such a plan or a programme, the national authorities will be responsible for the screening of likely significant environmental effects. Plans and programmes to be implemented as an outcome of the Baltic Sea Programme, which are **not** subject to a preparation and/or adoption by an authority at national, regional or local level must also be screened for likely significant environmental effects. This will be the responsibility of the Implementation Authority of the BSR Programme.

Specific projects subject to the requirements in the EIA directive fall under the discretion of the national authorities.

7.2 Step two

Activities may be proposed aiming at setting the framework for development of subsequent activities/measures. This might e.g. be for support to collaboration between different stakeholders from different places in the Baltic Sea Region on project development within a specific area. In such cases the screening of likely significant environmental effects should be carried out for the specific projects. If support to the implementation of these projects is applied for under the Baltic Sea Programme they should be included in the overall procedure starting at step one.

7.3 Step three

At this step, the INTERREG Implementation Authority of the Baltic Sea Region Programme, in collaboration with the relevant environmental authorities, screen if the activity/measure is likely to have any significant environmental effects. The methodology for this should follow the directions given in the Handbook including:

- Identification of the key relevant environmental issues and concerns to be considered, based on the environmental issues listed in the SEA directive.
- Identification of the relevant environmental protection objectives, to be derived from current or forthcoming:
 - legal or regulatory frameworks,
 - environmental strategies, policies and action plans
 - sustainable development strategies
 - sector strategies and policy documents, e.g. transport or energy policies and strategies.
- Identification of relevant indicators and available data

In order to make this procedure workable it is proposed that the applicants as an integrated part of the application procedure provide all the above mentioned information. For this to be done systematically and transparent we have proposed a standard format to be filled by the applicants. This format is enclosed in appendix two.

7.4 Step four

The implementation Authority will on the basis of information provided by the applicant in step three take a formal decision whether an environmental assessment will be required.

The decision should ideally reflect the involvement of relevant National Environmental Authorities in step three and be based on their advice as to whether the applicants proposal is likely to have significant impacts on the environment.

8 Monitoring of the significant environmental impacts

The monitoring of the significant environmental impacts should be an integrated part of the interim and ex post evaluation of the Baltic Sea Programme 2007-2013.

The procedure proposed above for assessment of the project applications as well as monitoring of the implementation of the projects which has to be an integrated part of the SEA/EIA of the projects will feed in data to the interim and ex post evaluation.

It will be important when preparing the interim and ex post evaluations to include an explicit requirement on assessing the significant effects of activities and projects on the relevant environmental objectives. Also an explicit requirement should be included to the interim evaluation to propose corrective measures if the evaluation shows unexpected adverse environmental effects.

Appendix 1: Assessment of the relevance and consistency of proposed measures to the EU Environmental Policy Framework

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
Priority #1: Sustainable Communities / Fostering innovations across the BSR		
<p><u>1. Supporting the performance of innovation sources</u></p> <ul style="list-style-type: none"> • creation of model solutions in provision of appropriate technical (energy, transport, communication) and social infrastructure (education, further education, access to R&D resources, centres of excellence and competence), through adequate services, spatial planning and administrative support and exploitation of cultural differences in order to enhance cluster performance at the BSR level • stimulation of establishing of new clusters, notably in the E-BSR • connecting the capacity of regional clusters across national borders • enhancement of BSR trade and flows of FDI through transnational collaboration and partnership between private sector and public administration (e.g. supporting co-operation between SMEs from different countries, supporting outsourcing activities within BSR, influencing national and regional legislation etc.) • joint creation and dissemination of examples to better use the innovative potential of employees in enterprises • joint use of reciprocal (expensive) research equipments, labs, environmental tests • joint development of knowledge-intensive business services • transnational benchmarking of successful clusters, support schemes and policies • joint creation of model solutions and transferable results through collaboration within and between various clusters across national borders 	<p>No (direct) relationship with 6 EAP Priorities</p>	<p>No (direct) relationship with Thematic Strategies</p>

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
<ul style="list-style-type: none"> joint marketing of BSR achievements and capacities in creation and transfer of innovation and in attracting foreign direct investments 		
<p><u>2. Facilitating transnational technology transfer and dissemination of knowledge</u></p> <ul style="list-style-type: none"> provision of links between R&TD facilities and international centres of R&TD excellence to improve access to scientific knowledge and technology transfer development of transnationally relevant financial, organisational, legal and administrative support frameworks for technology transfer institutions co-ordination of approaches to business-driven innovation policies and strategies at national and regional level across the BSR creation of BSR support structures (support arenas, networks of national centres, transnational centres) for innovation and qualification joint efforts in improving access to knowledge and competence of SMEs in their international activities joint pilot implementation of broadly applicable innovations in BSR economy, notably in SMEs and craft firms (e.g. to facilitate routines or environmentally friendly production) 	<p>No (direct) relationship with 6 EAP Priorities</p>	<p>No (direct) relationship with Thematic Strategies</p>

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
<p><u>3. Strengthening the societal understanding and public participation</u></p> <ul style="list-style-type: none"> • facilitation of networking and exchange of best practices on education and other policies, which provide ground for an innovation environment • strengthening of educational facilities and structures in higher and further education or life-long learning for more efficient diffusion of innovations across the BSR • creation of pilot examples to improve technical knowledge in the BSR among various age groups • developing best practise examples on regional and local communication between various actors, social groups etc. concerning effects of innovations • developing best practice on attracting people of different age, gender and profession to innovation issues and on promotion of entrepreneurship and innovation spirit • developing demonstration projects to show how increased competitiveness can be better linked with social progress • preparation of regional strategies for promoting and using human resources for the benefit of diffusion of innovations across the BSR 	<p>No (direct) relationship with 6 EAP Priorities</p>	<p>No (direct) relationship with Thematic Strategies</p>

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
Priority #2: Managing our environment wisely / External and internal accessibility of the BSR		
<p>1. <u>Mutually complementary measures in transport and ICT enhancing accessibility and socio-economic growth</u></p> <ul style="list-style-type: none"> • Planning and implementation schemes for the Baltic Motorways of the Sea as extensions and connecting sections of land-side transport corridors • Development and deployment of small-scale solutions to improve interoperability with regard to port-hinterland connections and links between transnational-national-regional networks (addressing worst cases, highlighting good examples and creating new ones) • Optimising air transport connections in the BSR in the context of sustainable development, economic growth and accessibility • Preparation of investments in and raising quality of public transportation catering for better connectivity of handicapped areas (e.g. remote areas, areas with low and scattered population pattern etc.) • Preparation of investments increasing absorption of ICT in lagging behind areas and counteracting the territorial digital divide • Capacity and harmonisation of transport and ICT policies across countries and with translation to comprehensive regional development policies, supple- 	<p>Objective is not in conflict with 6 EAP Priorities, though the subject of transport potentially violates all 6EAP priorities, especially priority 1 (Climate Change), due to the environmental damages caused by gas emissions.</p>	<p>Objective is not in conflict with Thematic Strategies, though the subject of transport potentially violates:</p> <p>TS 1 : Air pollution;</p> <p>TS 3 : Marine environment;</p> <p>due to the environmental damages caused by gas emissions.</p>

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
<p>mented with education actions</p> <ul style="list-style-type: none"> • Provision, testing and territorial impact assessment of solutions in transport and ICT adjusted to low population density in the North and to increased demand for transport infrastructure and services in the South 		
<p>2. <u>Actions stimulating further integration within existent strategic development zones and creation of new ones (aimed to better exploit socio-economic potential of the adjacent territories)</u></p> <ul style="list-style-type: none"> ▪ Preparation of multimodal transport solutions (with particular attention to maritime, inland waterway and rail transport) aimed at combating bottlenecks and missing links along transnational transport corridors and allowing to transform them to strategic development zones ▪ Development of solutions safeguarding stability of development zones identified and investigated under Interreg IIC and IIIB (joint transnational development programmes and thematic strategies, establishment of institutionalised structures for monitoring and counselling on investments, elaboration of common brand products etc.) ▪ Elaboration, testing and dissemination of models and tools for efficient management of strategic development zones 	<p>Objective is not in conflict with 6 EAP Priorities, though the subject of transport potentially violates all 6EAP priorities, especially priority 1 (Climate Change), due to the environmental damages caused by gas emissions.</p>	<p>Objective is not in conflict with Thematic Strategies, though the subject of transport potentially violates:</p> <p>TS 1 : Air pollution;</p> <p>TS 3 : Marine environment; due to the environmental damages caused by gas emissions.</p>

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
Priority #3: Challenging accessibility / Management of the Baltic Sea as a common resource		
<p>1. <u>Economic management of open sea areas and sustainable use of marine resources</u></p> <ul style="list-style-type: none"> ▪ Preparation of strategies, actions and pilot investments on using marine resources e.g. joint transnational efforts on advanced technologies, mari-culture, exploitation of gas hydrates, offshore wind energy, fish breeding, use of biomass, underwater tourism) ▪ Actions oriented towards sensitivity mapping of Baltic Sea space resulting in visualisation of investigated potential of marine resources as well as in detection of possible conflict areas 	<p>Objective is in line with:</p> <p>Priority 1: Climate Changes: Offshore wind energy and exploitation of gas hydrates will contribute to reduce gas emissions</p> <p>Priority 2 : Nature and Biodiveristy:</p>	<p>Objective is in line with:</p> <p>TS 1 : Air pollution: Offshore wind energy and exploitation of gas hydrates will contribute to achieve the emission reductions targets</p>
<p>2. <u>Water management with special attention to challenges caused by climate changes and/or demographic changes</u></p> <ul style="list-style-type: none"> ▪ Development of strategies and joint demonstration actions to improve water quality in the Baltic Sea and its catchment area, efficient water usage and water supply as well as flood protection measures 	<p>Objective is in line with:</p> <p>Priority 2: Nature and Biodiveristy: Actions will contribute to development and</p>	<p>Objective is in line with:</p> <p>TS 1 : Air pollution: Actions (indirectly) help "integrating air quality concerns</p>

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
<ul style="list-style-type: none"> ▪ Development of legislative frames and concrete strategies, action plans and implementation actions for minimising impacts of climate change on water management ▪ Joint solutions and pilot actions towards better protection of valuable marine resources 	<p>protection of natural systems</p> <p>Priority 4: Natural Resources and Wastes:</p> <p>Actions will halter the consumption of resources, in order to not exceed the capacity of the environment</p>	<p>into other policy areas".</p> <p>TS 3: Protection and Conservation of the Marine Environment:</p> <p>By protection of marine resources and improvement of water quality, the actions contribute to cleaner and restored oceans.</p>
<p>3. <u>Integrated development of off-shore and coastal areas</u></p> <ul style="list-style-type: none"> ▪ Preparation of strategies, tools and methods to minimise environmental risks resulting from both natural hazards and human activities (marine transport, tourism, fisheries etc) ▪ Joint actions to enhance preparedness and response on the sea in case of accidents or spills (contingency planning, harmonisation of legislative frames, principles, rules and regulations) ▪ Joint strategies and actions to increase reliability of maritime transport in the Baltic Sea (e.g. ice breaking, transport of dangerous goods) ▪ Harmonisation of national management plans on marine environment and joint transnational implementation of their relevant parts 	<p>Objectives are indirectly in line with 6 EAP Priorities (mostly Priority 2 and 4), in that the primarily the human hazards it seeks to prevent/overcome, have a potential negative influence on the environment.</p>	<p>Objectives are indirectly in line with Thematic Strategies (mostly TS 3), in that primarily the human hazards it seeks to prevent/overcome, have a potential negative influence on the environment.</p>

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
<ul style="list-style-type: none"> ▪ Development and implementation of integrated coastal zone management aiming at competence building at regional and national level ▪ Preparation of scenarios, strategies and intervention plans towards mitigation of impacts of climate changes on coastal areas 		
Priority 4 : Promoting attractive and competitive cities and regions		
<p>1. <u>Strengthening metropolitan regions, cities and urban areas as engines of economic development</u></p> <ul style="list-style-type: none"> ▪ Nurturing transnational urban co-operation established to solve common regional economic development problems (e.g. entrepreneurship policies, attraction of foreign direct investment, promotion of knowledge economy, corporate decision-making, business environment quality, labour productivity, preservation of urban environment, strengthening of civil society as important developmental factor etc.) ▪ Further development of transnational urban co-operation established to improve joint supply of high quality services of general socio-economic interest through co-operation of cities and regions and wise use of ITC solutions (e.g. health services, public transportation services, education services, employment services) ▪ Joint preparation and implementation of economic transformation strategies (from manufacturing to service) in the networks of non-metropolitan cities, 	<p>Objectives potentially in conflict with the 6EAP Priorities, due to the potential environmental damages caused by increase in industry and urban growth</p> <p>Action 5 is in line with Priority 3 (Environment and Health and Quality of Life), since it encourages a sustainable urban development.</p>	<p>Objectives potentially in conflict with the 6EAP Priorities, due to the potential environmental damages caused by increase in industry and urban growth</p> <p>Action 5 is in line with TS7 (Urban Development), in that it reduces the adverse environmental impact of cities on the wider environment.</p>

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
<p>with particular attention to smaller and peripherally located settlements</p> <ul style="list-style-type: none"> ▪ Elaboration, testing and dissemination of policies (including model solutions and good practices) on the co-operation among and between metropolises and small and medium-sized cities ▪ Joint creation of transferable solutions for efficient urban-rural partnerships tackling joint development problems (e.g. suburbanisation, increased commuting, joint energy savings, alternative and renewable energy management, solutions to link urban and rural tourism) ▪ Development and implementation of common adaptation strategies for rural areas in need of conversion (with focus on settlement structures) to maintain and increase employment opportunities 		
<p>2. <u>Strategic support for integrated BSR development and socio-economic and territorial cohesion</u></p> <ul style="list-style-type: none"> ▪ Preparation and implementation of <u>cross-sectoral and territorial development</u> strategies at the pan-Baltic level to guide socio-economic transformation of the Region (e.g. on branding of the BSR, transformation of settlement structures in the rural areas, afforestation, strengthening sustainable use and management of natural and cultural resources, development of networks of protected areas etc.) ▪ Preparation and implementation of joint strategies for energy saving and cleaner production, promotion and transfer of knowledge in alternative and renewable energy management patterns, environmentally sound and eco-efficient technology ▪ Preparation and implementation of marketing strategies and efforts on BSR 	<p>Generally no (direct) relationship with 6 EAP Priorities.</p> <p>Action 2 in line with:</p> <p>Priority 1 : Climate change:</p> <p>Action 2 will contribute to ensure that the gas emissions of the energy and industrial sectors will decrease</p> <p>Priority 3: Environment and Health and Quality of Life:</p>	<p>Generally no (direct) relationship with 6 EAP Priorities.</p> <p>Action 2 in line with:</p> <p>TS 1 : Air pollution:</p> <p>Energy saving will contribute in reaching the emission reduction targets</p> <p>TS7 Urban development:</p>

BSR Operational Programme	Relationship with 6EAP Priorities	Relationship with Thematic Strategies
<p>strongholds in business and business environment (infrastructure, culture, nature) including conclusions on necessary improvements</p> <ul style="list-style-type: none"> ▪ Preparation and implementation of transnational adaptation strategies, actions and models addressing demographic change and migratory processes ▪ Joint actions securing better involvement of broader public and NGOs in transnational territorial development and implementation of cross-sectoral strategies ▪ Development of BSR tourist products based on the area’s cultural heritage and natural assets (e.g. planning and launching of transnational tourism routes, promotion of BSR eco-tourism, rural tourism etc.) 	<p>Action 2 will encourage a sustainable urban development</p>	<p>Action 2 will contribute to making cities more attractive and healthier places to live in, especially through the transfer of knowledge (in TS7 called exchange of best practices)</p>

Appendix 2: Assessment of the environmental impacts of the proposed measures

Directions for support	Environmental issues and objectives to be considered	Environmental Criteria	Potential Impact	Comments and Assumptions
Priority #1: Sustainable Communities				
Area of intervention #1.1: Promoting place-based development and improving the Baltic Sea's built environment				
Heading #1.1.1: Demographic change				
N/A				
Heading #1.1.2: Climate change				
"Support should be directed to the promotion of innovative and sustainable building design such as flood-resistant housing, mobile homes, and concepts for multi-functional lands use, and other solutions in response to severe weather conditions, as well as implications for planning legislation, policy, and practice. Innovations in these fields might have great impact on the planning systems and investment decisions as regards provisions for temporary spatial functions and multifunctional land use." (p 18)	adaption to climate change	reduction in the risks posed to humans and material assets due to severe weather conditions	+	
Heading #1.1.3: Energy				
<p>" Actions should be supported in the following fields:</p> <ul style="list-style-type: none"> ▪ Utilising the potentials for renewable energy production, both in urban and rural areas, aiming at diversification of the regional economies and self-sufficient energy supply. In doing so, the promotion of renewable and environmentally friendly energy sources and technologies at regional levels (e.g. regional funding schemes), ▪ Transnational co-operation for regional energy alliances, e.g. agreements on assimilation and management of potential energy supply fluctuations between regions, ▪ Linking these potentials to education and training measures for innovation in the energy 	energy (use of renewable and non-renewable resources)	* degree to which renewables are covering energy supply	+	
	climate	* degree to which off setting of greenhouse gas emissions	+	
	air	* degree to which a reduction of air pollutants may be achieved	+	

Directions for support	Environmental issues and objectives to be considered	Environmental Criteria	Potential Impact	Comments and Assumptions
sector and regional competitiveness. <ul style="list-style-type: none"> ▪ Developing transnational model solutions, e.g. as regards financing models and promoting public-private partnership, also with a view to affordability of housing stock and related social consequences." (p. 19) 	land use	taking of land to erect constructions/facilities	(-)	Most probably negative impact. If construction/facilities replace existing construction/facilities it might have a neutral or positive impact
	landscape	landscape impact of constructions/facilities	(-)	do
Area of intervention #1.2: Integrating regions and fostering the development networks				
Heading #1.2.1: Urban and rural development and networking				
N/A				
Heading #1.2.2: Sustainable growth				
N/A				
Heading # 1.2.3: Regional identity and cultural heritage				
"The natural and cultural heritage shall be utilised as an opportunity to exploit potentials for the development of strategies for sustainable tourism as a driving force for regional development and the diversification of monotype or lagging economies, identity, and social inclusion. At the same time, sustainable tourism shall be enhanced as a means to manage and preserve habitats and biodiversity, which will contribute to a high attractivity of rural areas. Actions shall include skills development and training of SMEs, networking and knowledge exchange on tourism development, using the opportunities described above (sustainable	cultural heritage Biodiversity	loss of cultural heritage	+/-	If same amount of tourism also in sensitive areas: probably positive impact If increased tourism insensitive areas: negative impact

Directions for support	Environmental issues and objectives to be considered	Environmental Criteria	Potential Impact	Comments and Assumptions
growth)". (p. 20)	biodiversity, flora and fauna	change in net loos of biodiversity	+/-	do
	landscape	landscape impact	+/-	do
	transport demand	degree to which number of passenger km is influenced	+/-	<p>There might be potential for a positive impact if e.g. the sustainable tourism includes promotion of bicycle tourism.</p> <p>If the overall amount of tourism increases due to activities supported it might lead to increased transport demand.</p>
Area of intervention #1.3: Promoting good governance, community engagement and capacity building				
Heading #1.3.1: Support to local psychical environment				
"Actions should support the upgrading of the urban environment and public realm including urban renewal and brownfield development, and the strengthening of existing or development of new regional and economic clusters as well as their interregional and transnational functional complementarity with urban and metropolitan growth centres within and outside the Baltic Sea" (p. 20)	biodiversity	harnessing the loss of biodiversity	+	
	soil	Contaminated land	+	
	land use	degree of redevelopment of defunct land	+	

Directions for support	Environmental issues and objectives to be considered	Environmental Criteria	Potential Impact	Comments and Assumptions
	landscape	reshaping landscape of brownfield land	+	
Heading #1.3.2: Social inclusion				
N/A				
Heading #1.3.3: Community involvement and participation				
N/A				
Heading #1.3.4: Multi level governance (including maritime policy as many actions have maritime focus)				
N/A				

Priority #2: Managing our environment wisely				
Area of intervention #2.1: Creating a "lower carbon economy" through promoting innovation in sustainable practise				
[no headings under this area of intervention]				
Realise and create framework conditions for large-scale uptake of renewable energy sources. In particular it is important to build on existing strengths where the Baltic Sea Region is a leader or has strong potential, i.e. the development of off-shore wind power, tidal power as well as in exploring the full range of potential. In particular, further actions should be directed towards exploring the opportunities for technology transfer, networking on optimal production methods with regards to renewable energy. (p.24)	energy	degree to which an increase in energy efficiency takes place	+	
	use of renewables and non-renewables	degree to which the share of resources in energy are renewables	+	
	climate	degree to which greenhouse gases is reduced	+	

Directions for support	Environmental issues and objectives to be considered	Environmental Criteria	Potential Impact	Comments and Assumptions
	air	degree to which air pollutants emissions are reduced	+	
	land use	land take to new constructions/facilities	-	New constructions/facilities will have possible negative impact, except if these constructions/facilities replace other facilities with an even bigger impact
	landscape	landscape impact of large constructions	-	Do
Area of intervention #2.2: Anticipating and reducing risks and pollution in the Baltic Sea				
Heading #2.2.1: Anticipating and reducing risks posed to property, landscapes, nature, industries by climate change				
<p>"Practical research and implementation of the "living with water" concept, investigations into storm resistant coastal landscape and setting up common flood contingency frameworks are among some of the examples. It is important that such forward – looking risk management practices are sustained, but further thought can be also given to the set up and implementation of regional adaptation plans bringing together multiple institutions and stakeholders and many fields of action such as nature protection, civil protection and security policy. In order to develop and promote the Baltic Sea Region as a model of excellence in this field, it is im-</p>	biodiversity	decrease in net loss of biodiversity	+	
	land use	resulting land take	+	
	landscape	landscape impact	+	

Directions for support	Environmental issues and objectives to be considered	Environmental Criteria	Potential Impact	Comments and Assumptions
<p>portant that good risk management practices, especially in areas where the Baltic Sea region has a proven record, be transferred to other regions of Europe and beyond." (P. 26)</p>	<p>* material assets</p>	<p>protection of material assets</p>	<p>+</p>	
<p>Heading 2.2.2: Developing preventative and response measures to address marine acute and chronic pollution</p>				
<p>N/A</p>				
<p>Heading #2.2.3: Managing and protecting the marine environment from cumulative and potentially conflicting uses of the area</p>				
<p>N/A</p>				
<p>Area of intervention #2.3: Developing a high quality environment</p>				
<p>Heading #2.3.1: Managing fresh water resources in the Baltic Sea Region</p>				
<p>N/A</p>				
<p>Heading #2.3.2: Sustainable land and ecosystem management</p>				
<p>N/A</p>				
<p>Examples of activities</p>				
<p>N/A</p>				
<p>Priority #3: Challenging accessibility</p>				
<p>Area of intervention #3.1: Harness an improved accessibility through new and existing technologies, and exploit regional economic potentials</p>				
<p>N/A</p>				

Directions for support	Environmental issues and objectives to be considered	Environmental Criteria	Potential Impact	Comments and Assumptions
Heading #3.1.1: Cargo transport				
<p>"Support should aim towards the improvement of and innovations in cargo logistics systems especially in port operations, inter-modal transport interfaces, and transport monitoring systems, e.g. by utilising ICT and new technology. For cargo transport, congestions on hinterland connections on road and railroad needs to be addressed with improved traffic management technologies and organisational measures, where ports, terminals, transporters as well as road and railway companies/authorities are joining efforts. This could comprise development of new logistic systems, new logistics concepts, development of ICT systems, as well as new ways of implementing technologies, including organisational issues and means of reducing the transport needs. One element is to develop and test identification and tracking systems as well as organisation arrangements so that the customs regime can be just as efficient for sea transport as for trucking". (p.4)</p>	air	degree to which air pollutants are reduced	+	
	human health	degree to which noise and air quality is managed	+	
	land use	degree to which land use is diverted towards inter-modal transport measures	+	
Heading 3.1.2: Passenger transport				
N/A				
Heading 3.1.3: Inter-modal transport systems				
N/A				
Area of intervention #3.2: Fostering territorial cohesion, regional integration and governance through the improvement of accessibility to maritime information				
N/A				
Heading #3..2.1: IT provision for integrated maritime spatial planning				
N/A				
Heading #3.2.2: Maritime safety and security				

Directions for support	Environmental issues and objectives to be considered	Environmental Criteria	Potential Impact	Comments and Assumptions
"Measures may comprise elements like shipping lanes, port and harbour navigation channels, ship movements, radar and satellite surveillance, aids to navigation, etc". (P.6)	water	degree to which the application of measures reduces risks of pollution/hazards	+	
	biodiversity		+	
	material assets		+	
Area of intervention #3.3: Applying innovative policies and technologies for improved accessibility				
Heading # 3.3.1: Access to ICT infrastructure				
N/A				
Heading 3.3.2: Equal access to public services - E-government and eDemocracy				
N/A				
Heading # 3.3.3: ICT for enabling networking of SMEs and entrepreneurship				
N/A				
Examples of activities				
Actions to improve intelligent infrastructure models and practices, such as actions to improve intelligent traffic systems, including improvement of road safety	human health air	degree to which the employment of ITS off sets hazards to human health and emission of air pollutants	+	
Develop measures reducing the transport volumes	air		+	
Rest of the outlined activities: N.A	N/A			

Appendix 3: Format to be filled in by project applicants

Introduction

The purpose of this format is to assess if the proposed project is likely to have any significant environmental impacts and, if it is, to scope the subsequent strategic environmental assessment.

The SEA Directive (2001/42/EC) requires that an SEA is carried out by the national authorities for plans and programmes which are subject to a preparation and/or adoption by an authority at national, regional or local level, including those co-financed by the European Community.

If the proposed project is such a plan or a programme, the national authorities will be responsible for the screening of likely significant environmental effects and this format should not be filled.

Nor should the format be filled if the proposed project is a specific project being subject to the requirements in the EIA directive as these requirements fall under the discretion of the national authorities.

8.1 Likely significant environmental impact

Is the project likely to significantly impact any of the below mentioned issues (positive as well as negative impacts):

Environmental issue	Yes	No
Biodiversity, flora and fauna		
Population and human health		
Soil		
Water		
Air and climatic factors		
Material assets		
Cultural heritage, including architectural and archaeological heritage		
Landscape		
Land take		
Energy efficiency		
Use of renewable and non-renewable resources		
Adoption to climate change		
Transport demands		
Others (if yes which?)		

8.2 Relevant environmental projection objectives likely to be influenced by the project

Please list the environmental protection objectives relevant for each of the environmental issues the project is likely to significantly impact, including environmental projection objectives established at EU, regional, national and/or local level. For objectives established at EU and national levels, please refer to the attached table as inspiration.

Environmental issues as identified above	Environmental protection objectives established at EU level	Environmental protection objectives established at national level	Environmental protection objectives established at local level
•	•	•	•
•	•	•	•
•	•	•	•

8.3 Indicators and data

Please propose indicators for each of the identified environmental issues suitable for the assessment of the likely significant environmental impact. For inspiration, please refer to the examples given in appendix two.

Please also list the data available for the assessment of the likely significant environmental impact

Environmental issues as identified above	Indicators to assess the likely significant environmental impact	Available data

Annex one: Environmental protection objectives established at EU, regional and national level

The table from the scoping report to be inserted

Annex two: Examples of indicators

In the table below, examples on relevant indicators are given for a number of environmental issues. Please note that the examples are only meant as an inspiration, other indicators might be more relevant.

Environmental issues	Examples of possible indicators to assess the likely significant environmental impacts
Biodiversity, flora and fauna	<ul style="list-style-type: none"> • Change in net loss of biodiversity (if possible break down in relevant species) • Change in size and/or condition of valuable natural areas
Population and human health	<ul style="list-style-type: none"> • Change in human exposure to hazardous substances
Soil	<ul style="list-style-type: none"> • Condition and extend of abandoned brownfield sites
Water	<ul style="list-style-type: none"> • Changes in emissions of hazardous substances to marine or fresh water environments • Changes in the water quality in marine or fresh water environments

Environmental issues	Examples of possible indicators to assess the likely significant environmental impacts
Air and climatic factors	<ul style="list-style-type: none"> •
Material assets	<ul style="list-style-type: none"> • Damages to material assets from air pollution • Possibilities to use land for social/commercial purposes after it has been cleaned up
Cultural heritage, including architectural and archaeological heritage	<ul style="list-style-type: none"> • number of listed buildings and archaeological sites at risk
Landscape	<ul style="list-style-type: none"> • Impact on landscape from new infrastructure
Land take	<ul style="list-style-type: none"> • area and quality of land unfit for use for other purposes
Energy efficiency	<ul style="list-style-type: none"> • use of energy per unit produced
Use of renewable and non-renewable resources	<ul style="list-style-type: none"> • share of renewable energy sources in the energy supply
Adoption to climate change	<ul style="list-style-type: none"> • Number of persons or buildings exposed to threats from extreme weather conditions
Transport demands	<ul style="list-style-type: none"> • Increase in number of ton/km or parson/km