



Ex Ante Evaluation of the North Sea Region Programme 2014-2020

Final Ex Ante Evaluation Report (June 2014)



Report to the Managing Authority of the 2007-13 North Sea Region Programme

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The place of useful learning

Preface

This is the final report of the Ex Ante Evaluation of the 2014-202 North Sea Region Programme. The evaluation was undertaken by a research team from the European Policies Research Centre at the University of Strathclyde in Glasgow. The aim of the ex ante evaluation was to provide an external perspective on the preparation of the new Programme with a view to improving and strengthening the final quality of the Programme and optimising the allocation of resources. Within EPRC, the evaluation was managed and undertaken by the following team:

- Dr Irene McMaster
- Dr Keith Clement (prepared Strategic Environmental Assessment)
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European Policies Research Centre Glasgow June 2014 Ex Ante Evaluation of the North Sea Region Programme 2014-2020

Ex Ante Evaluation of the 2014-2020 North Sea Region Programme: Summary of Key Findings and Recommendations

This report comprises the ex ante evaluation of the North Sea Region Programme (NSRP) undertaken by the European Policies Research Centre (EPRC) for the NSRP Managing Authority. The ex ante evaluation was conducted in accordance with DG REGIO Guidelines on Evaluation Methods. The purpose of the ex ante evaluation was to improve and strengthen the quality of the programme under preparation and to optimise the allocation of resources. The evaluation team provided inputs throughout the Programming process on an iterative and interactive basis. This process allowed the evaluation to be carried out in a supportive and constructive way. The NSRP Operational Programme (OP) is the result of a lengthy and extensive drafting process, which has involved stakeholder and partner consultation and discussion, high-level inputs from national and regional representatives, numerous lengthy and detailed background analyses and reports, regular meetings and discussions, and the submission of a number of programme drafts to key programming groups.

Programme Strategy

The Programme is required to set an overall strategy for the cooperation programme's contribution to the Union strategy of Smart, Sustainable, and Inclusive Growth. The Programme's strategy has been modified and refined over time, taking into account a wide range of views and inputs. All the elements of a solid strategy are in place and a significant number of additions and improvements have been made to the OP text. The rationale, justification and purpose of the Programme are now more clearly conveyed. The considerable evidence base used to inform the strategy has now been integrated and referred to in the text.

The Priority Axes are rooted in an analysis of the Programme area's strengths and weaknesses, draw on past experience, take into account partner feedback, and fit well with relevant policy frameworks, most notably Europe 2020. The drafting team has taken into account a wide range of EU and domestic policy priorities and has considered how these align with the broad areas of intervention being considered by the NSRP.

The Priority Axes and Specific Objectives generally fit well within relevant thematic objectives and investment priorities. They can also work well together, supporting complementary areas of activity. In some respects, the overall focus of the Programme remains comparatively broad, covering a number of thematic areas. However, the Programme has faced barriers to narrowing its focus further, with Member State and stakeholder feedback pushing for the inclusion of some themes, and the inter linkages between key themes making exclusions challenging, particularly in relation to environmental interventions. Nevertheless, efforts have been made to develop focused and targeted interventions within the Priority Axes. For example, focus on, e.g., smart specialisation and green mobility highlights the fact that strategic decisions were taken to refine and narrow the Programme's focus on key areas of strength within the programme area.

The ex ante team have made substantial comments on the strategy's content and structure. Initial interventions aimed at supporting and encouraging the process of refining the Programme's focus. Subsequent inputs aimed at helping the Programme convey the agreed priorities and objectives effectively in the OP text. Additional refinements to the OP text to consider include: ensure the focus on capacity building is reflected throughout, and sharpen and clarify the structure of some texts.

Coherence and coordination

As the character and content of the new Programme has developed, the drafting team considered the Programme's links to other policies and Programmes on an on-going basis. For the NSRP, there is an enormous number of relevant EU, national, regional and territorial frameworks, strategies and policies to consider. However, the drafting team developed a detailed base of information to work from.

Coherence is an issue which is returned to throughout the OP text. For example, links to Europe 2020 are a foundation for the programme strategy, text on each of the priorities refers to EU sectoral targets, and a separate section on 'coordination' has been written. Drawing on this base of information, it is anticipated that the 2014-2020 NSRP will be able to make a productive contribution to relevant strategies. For example, the NSRP is in a favourable position to foster relations and look at new ways to exploit and benefit from new and existing policies, and cooperation arrangements. Equally, the Programme sets itself apart by noting distinctions between the

NSRP and, e.g., Horizon 2020, COSME, EAFRD, LIFE +, and TEN-T.

As part of the Programming process it was useful to consider the position of the Programme in relation to other policies, frameworks and programmes. However, the policy environment will also evolve and change as the Programme progresses. In order to maximise the relevance of, and opportunities for, the Programme throughout the Programming period, such changes could be monitored and considered on an on-going basis, as is now noted in the OP text.

In terms of the OP text, the ex ante evaluation team have been keen to stress that a 'process' oriented approach could be used to develop this aspect of the Programme. Thematic links are highlighted and expectations for projects are considered. However, links to policies, programmes and frameworks are also something that the Programme should consider at a strategic level, e.g. by looking at how to build/maintain Programme (as well as project) links, how to best support projects in their efforts to engage, how to monitor and record links and opportunities.

Delivering results

The ex ante team has considerable understanding of the significant challenges involved in producing meaningful, useful and proportional indicator frameworks for the Programme. The aims in developing the indicator and performance frameworks are to retain a strong focus on the specific actions of the Programme and where it can best effect change.

The aim to use indictors directly in line with Programme interventions means that data availability is an issue for the Programme, especially for result indicators and targets. The evaluation team recognise that existing statistical sources have limited use in providing relevant indicators for the Programme. Therefore, the decision to pursue more qualitative approaches was supported, and work was undertaken to support the Programme in developing a methodology for establishing result indicators and targets, and future monitoring of progress. As with the indicators themselves, the methodology has to be proportional to the scale of the Programme and its resources. Therefore, targeted inputs from key experts are at its heart.

A potential criticism is the of focus on 'capacity' and 'potential' in the results indicators, which could be viewed as a step towards delivering change, as opposed to change in itself. Related, proposed output indicators are very much more in line with what one would assume would be the targets for the Programme. However, the Programme has to consider where it can make a direct and measurable impact or contribution to positive change. As noted, capacity building is an area where the Programme has scope to make a contribution at the Programme-level, through effective dissemination and application of outputs. It builds on and develops existing strengths and pushes towards changes that can be directly linked to the Programme.

An additional potential criticism is the definition of some indicators and potentially differing interpretations of indicators. However, the drafting team have developed definitions and explanations of key terms, which seek to address this issue and help stakeholders working with the indicators and reporting on them.

Although targets have not yet been set for result indicators, the proposed targets and milestones for output indicators and the performance framework are generally realistic. They are based on past experience and an overview of initial demand. Similarly proposals for the Programme monitoring system are advancing and are expected to be a step-forward from the current period. Taken together, lessons from past programme experience and responses to the new demands for 2014-2020 Programmes means that the NSRP has established appropriate structures for the management and implementation of the Programme.

A number of more administrative elements will be finalised following submission of the OP text and will form supporting material for partners, key issues to bear in mind include:

- Ways to engage new partners, and in particular the private sector;
- Clear and focussed guidance and training for partners, (particularly covering the results focus and what it means for projects);
- New expectations and pressures on projects, the implication of the Programme's focus on capacity building means that Projects and the Programme have to look beyond outputs to how the outputs can

be disseminated, applied and used;

- What role is there for different project 'types'; clustering projects, as in the 2007-13 period could prove a
 useful way to promote outputs and results;
- Project support is potentially going to be even more demanding in the future, with more pressure on the secretariat and contact points to deliver advice, guidance, 'informal monitoring/trouble shooting';
- The Programme has a more explicit focus on delivering tangible products services and processes. Information and guidance on what this entails for projects could be valuable.

Strategic Environmental Assessment

Prepared in accordance with Directive 2001/42/EC, the objective of the SEA is to compile a report that improves the environmental dimension of the new programme. Working with competent authorities in each participating country, relevant environmental themes were highlighted in baseline data and trends, from which four strategic environmental issues were identified for the programme area, related to biodiversity/ ecosystems, energy and resource efficiency, climate change, and marine pressures. The programme demonstrates a clear compatibility with the objectives of the Europe 2020 Strategy and the Seventh EU Environmental Action Programme, and it is also characterised by a high degree of environmental integration and targeting within the individual Priorities and Objectives. During implementation, the programme must aim to convey a clear message that positive environmental impact is a key element of the programme's approach, and that competition should be based on high environmental standards. Similarly, innovation should be understood as including environment – and potentially prioritise environment – as a means of fulfilling the vision that the NSRP is pursuing. Care should be taken to ensure that local sustainable materials are used and that the resource base in each region is fully explored and understood.

Conclusion

It is the conclusion of the ex ante evaluation that the 2014-2020 North Sea Region Programme has been developed in line with relevant regulations and requirements. The Programme has developed a robust rationale and 'logic' for its proposed interventions and has focused strongly on delivering outputs and results which address needs in the Programme area and contribute to Europe 2020 goals.

Strategic Environmental Assessment: Non-Technical Summary

The North Sea Region Programme 2014-2020 aims to facilitate the regions around the North Sea to join forces and work together on developing and testing more efficient and effective solutions to the main economic, environmental and transport challenges facing the region. The eligible regions include the whole of Norway and Denmark, eastern parts of the United Kingdom, three provinces of the Flemish Region of Belgium, the northwestern regions of Germany, northern and western parts of the Netherlands, and the south-western area of Sweden.

The INTERREG IV North Sea Region Programme, which concluded in 2013, emphasised sustainable development in the general objective of the programme and in two specific objectives. With regard to implementation, activities relating to the sustainable management of the environment have fallen into three main areas: cooperation on sea-related issues, exploring new ways to collaborate on integrated coastal zone management and marine strategies at a North Sea level; addressing water issues such as droughts and salt water intrusion into groundwater, adapting to rising sea level and flooding, and modelling and prediction tools at different scales; and low-carbon energy production and distribution around the North Sea. In terms of improving accessibility, transport projects have integrated energy issues, encompassing new approaches for more environmentally-friendly ships and shipping and enabling airports to address environmental challenges. Sustainable and competitive communities have been promoted through focusing on issues faced by the urban fringe and rural areas, with initiatives to improve services and environmental quality and increase energy efficiency. Overall, projects have supported technological change, derived compatibility between economic growth and environmental improvements, and increased the number of new environmental business opportunities.

The new North Sea Region Programme 2014-2020 has four thematic Priorities: Thinking Growth: supporting growth in North Sea Region economies; Eco-innovation: stimulating the green economy; Sustainable North Sea Region: protecting against climate change and preserving the environment; and Promoting Green Transport and Mobility. These four Priorities and the associated nine specific objectives should contribute to smart, sustainable and inclusive growth with, for example, actions on climate change adaptation including innovative approaches and taking account of the wider needs of communities.

Each country or region within the NSRP area has a distinctive environmental profile that conditions and supports programme development, and relevant environmental themes are highlighted in the baseline data and trends. Insofar as possible, these factors have been reviewed in collaboration with competent authorities in the participating countries, culminating in the identification of four strategic environmental issues, as follows.

Biodiversity and Ecosystems continue to be under stress in a number of countries within the programme area. The factors behind these impacts include land-use pressures, exploitation of natural resources and the landscape, pollution of air, water and land, and the effects of climate change. Agriculture is also a key source of diffuse pollutants, potentially impacting on the quality of rivers, coastal and transitional waters. Investment in more systems innovation and the development of more environmentally friendly resources and methods, such as organic pesticides, has been highlighted as useful for longer-term consideration. Action under this theme should be designed to reverse the decline in degraded ecosystem services such as water quantity and quality, soil and air quality, and halt the loss of biodiversity, delivering greater resource efficiency. Potential activities identified under this theme include developing climate-neutral business parks/urban projects, assessing pollution and environmental risks on the living resources and biodiversity of the North Sea ecosystem, and an ecosystem services approach through which sustainable development is measured throughout the ecosystem and not just by the advancement of technologies at certain points.

With regard to Energy and Resource Efficiency, there is an evident need for increased renewable energy generation, effective promotion of energy efficiency, and changes in travel choices. Whereas the share of energy generated from renewable sources (biomass, wind, sun and water) is increasing, the speed of development in the Netherlands, for example, is insufficient to meet the EU target, and emissions from the oil and gas industry in Norway are expected to remain at the current level up to 2020. A long-term vision for a low-carbon energy system should take into account the strategies of neighbouring countries and build on the four elements of energy savings, wind at sea, carbon capture and storage (CCS) and innovative biomass technologies. Potential activities identified under this theme include developing low-carbon business parks, building up learning factories for resource efficiency in each country in the North Sea Region that could act as competence centres for energy

and resource efficiency, and exchanging best practice and supporting uptake between different regions of initiatives related for example to smart cities with low-carbon transport, urban design/land use, and energy efficiency.

Climate Change is associated with a range of potential impacts in the programme area. These factors include an increase in frequency and severity of flooding, sea-level rise, landslides and avalanche, as well as reinforcement of the negative consequences of other pressures resulting in the destruction of habitat, the spreading of alien species, pollution and overuse of natural resources. More frequent and intense precipitation is also expected to cause problems for agriculture and may cause erosion; and sea acidification is also likely to accelerate. Potential activities under this theme include promoting and sharing case studies where businesses have taken advantage of the opportunities of climate change, enhancing climate-modelling capacity with an emphasis on investment in regional initiatives, and creating synergies, for instance by taking measures to adapt to climate change by developing 'building-with-nature' technologies that also promote biodiversity.

Marine Pressures within the programme area include source and diffuse pollution (particularly coastal and transitional waters), marine litter and invasive species, and aspects of climate change. Eutrophication occurs through discharges of nutrients, for example from fish farming, but also through runoff from agricultural areas and inputs from industry and municipal wastewater treatment. The input of nutrients to coastal waters is expected to rise with climate change, which will entail higher erosion rates and more leaching of nutrients from soil, particularly with higher precipitation, especially in winter. Marine areas are under growing pressure from human activities such as aquaculture, extensive fishing and oil and gas production. Potential activities under this theme include utilising integrated coastal zone management (ICZM) to cope with demands on the coastal area made by different economic sectors and the environment, developing a toolkit/procedure/manual on how to improve the efficiency of ICZM in the North Sea region, accompanied by associated demonstration projects illustrating how waste for one is a resource for another, and developing protection systems to handle the increasing pressure on ecosystems and water resources.

In the Strategic Environmental Assessment, the programme's Strategy, Vision and Priorities are considered for their conformity with the Europe 2020 Strategy and the EU Seventh Environmental Action Programme. This analysis demonstrates a clear compatibility between the EU policies and the NSRP programming document. Thereafter, each of the Objectives is assessed for potential impacts on the strategic environmental issues.

With regard to significant positive environmental effects, the potential environmental benefits could be long-term and cumulative in nature, for example as projects designed to support a green economy realise opportunities for investment and employment-creation in areas such as renewable energy and energy efficiency, reducing carbon emissions by furthering the transformation in the energy system away from fossil fuels. Furthermore, the adoption and mainstreaming of a holistic environmental management approach, which ensures that environmental impacts do not exceed sustainable limits for any aspect of the North Sea Region's ecosystem, would allow a natural balance to be maintained in the long term. Other potentially significant impacts could emerge from reorienting businesses towards a more sustainable direction and practices, opening up new growth opportunities, and involving a greater focus on using locally available resources; whereas improving modal choice in transport also has scope for significant positive impact, supporting the transition of the NSR transport system to much less environmentally damaging practices. Other positive effects may emerge from tackling climate change, as the programme supports the development or improvement of methods for adapting to potential and anticipated impacts, and there is potential for long-term positive impact if new niche sectors are created or identified, in which environmental techniques, technologies and other products are promoted and marketed to generate sustainable new activity.

Significant negative environmental effects would relate to unanticipated impacts, indirect effects or where projects are mismanaged or environmental conditions not fully observed. Risks to human health are anticipated as minimal, particularly since the partner countries have robust systems of environmental control and planning, and the transboundary nature of cooperation is likely to produce a better understanding and exchange of experience with regard to environmental control. However, achieving higher energy efficiency could involve negative environmental impacts, depending upon the type of energy generated; and there is also a risk of failing to meet sustainability principles, for example if resources are drawn from other areas and building materials are not based on natural products from the programme area. Other disadvantageous outcomes might relate to supporting familiar regional environmental strengths rather than creating a new development path that generates

innovative environmental solutions, and incidences of projects aiming for minimum environmental compliance rather than pursuing environmental excellence.

To mitigate negative impacts, the programme must convey a clear message that positive environmental impact is a key element of the programme's strategy, and that competitiveness should be based on high environmental standards and environmental management techniques. Innovation should be understood to include environmental excellence as a means of fulfilling the vision that the NSR programme is pursuing. Natural resources must be exploited in a sustainable manner, avoiding risks of further pollution, with greater awareness of sustainability thresholds and the capacity of various environments to accommodate greater loads to avoid threatening natural resources and habitats or polluting air, water or land. During implementation, appropriate monitoring and feedback will be required regarding the impacts of completed initiatives.

Monitoring indicators are required to determine environmental effectiveness. In practice, these indicators should not only encapsulate effectiveness in addressing the strategic environmental issues but should also contribute to measuring the effectiveness of the NSR Programme overall. A range of potential indicators is provided, with suggestions for the division between Priorities and Objectives.

Contents

1.	E۱	ALUATION APPROACH AND METHODOLOGY	6
1.1	Int	ervention Logic	7
1.2	Ар	proach	10
2.	PF	ROGRAMME PREPARATION	11
3. ⊔∩⊑		ROGRAMME STRATEGY, PRIORITY AXES, SPECIFIC OBJE	10
3.1		ntext	
3. i 3.2		veloping Programme Focus	
3.3		Ante Assessment	
3.3		Strategic focus	
3.3		Aligned with investment priorities	
3.3		Justification of strategy	
3.3		Logical & Relevant	
3.3		Results oriented	
3.3		'Internal coherence'	
3.3	3.7	Targeted	
3.3	3.8	Well-communicated?	
3.3	3.9	Horizontal Themes	38
3.4	Ov	erview	40
4.	E	(TERNAL COHERENCE	44
4.1	Со	ntext	44
4.2	Es	tablishing Programme Coherence	44
4.3	Ex	Ante Assessment	46
4.3	3.1	Europe 2020	46
4.3	3.2	EU sectoral programmes and policies	54
4.3	3.3	Territorial Cooperation Programmes and Frameworks	
4.3	3.4	Domestic Policy	
4.3	3.5	Overview	65
5.	DE	ELIVERING RESULTS: INDICATORS AND IMPLEMENTATIO	N70

5.1	Context	70
5.2	Establishing frameworks and structures	72
5.3	Ex ante Assessment	74
5.3	3.1 Financial Allocations and Interventions	74
5.3	3.2 Programme Indicators	75
5.3	3.3 Methodology and definitions	79
5.3	3.4 Milestones and targets	81
5.3	_	
5.3	3.6 Overview	86
6.	SEA: INTRODUCTION	90
6.1	Objective of the Strategic Environmental Assessment	90
6.2	Key Facts	91
6.3	Programme Context	93
7.	THE NORTH SEA REGION PROGRAMME IN CONTEXT	95
7.1	Introduction	95
7.2	INTERREG IV North Sea Region Programme 2007-2013	95
7.3	North Sea Region Programme 2014-2020	97
7.4	Relevant Environmental Strategies, Programmes and Policies	99
8.	ENVIRONMENTAL BASELINE AND TRENDS	105
8.1	Introduction	105
8.2	Regional Environmental Characteristics/Baseline Information	106
9.	STRATEGIC ENVIRONMENTAL ISSUES	119
9.1	Introduction	119
9.2	Biodiversity/Ecosystems	119
9.3	Energy and Resource Efficiency	120
9.4	Climate Change	121
9.5	Marine Pressures	122

10.	ENVIRONMENTAL ASSESSMENT	124
10.1	Introduction	124
10.2	Alternatives	124
10.3	Appraisal of Programme Elements	126
10.4	Significant Effects	135
10.5	Mitigation	137
10.6	Indicators for Monitoring Environmental Effectiveness	139
11.	CONCLUSIONS OF THE EX ANTE EVALUATION	144
12.	ANNEX	152

Ex Ante Evaluation of the North Sea Region Programme

NORTH SEA REGION PROGRAMME EX ANTE EVALUATION: FINAL REPORT (VERSION 1)

INTRODUCTION

The purpose of the ex ante evaluation is to improve and strengthen the quality of the programme under preparation and to optimise the allocation of resources. Cohesion Policy programmes for the 2014-2020 period are expected to be strongly oriented towards results, which reinforces the role of the ex ante evaluation to ensure that the Operational Programme (OP)¹ clearly articulates its intervention logic and demonstrates its contribution to the Europe 2020 strategy. This Final Report of the ex ante evaluation of the 2014-2020 North Sea Region Programme (NSRP) provides an evaluation of the Operational Programme (version May 2014). The report also covers the Strategic Environmental Assessment (SEA), which is an integral part of the ex ante evaluation and programme development process. The report is based on the final drafts of the OP. However, it is noted that a small number of additions/revisions may be made to the OP text in the lead up to submission.

The structure of the report is as follows.

Part 1: Approaches and Methodology

- Section 1 explains the approach taken to the ex ante evaluation, including the overall aims, the evaluation process and the evaluation outputs.
- Section 2 reviews the NSRP programme development and drafting process.

Part 2: Strategy Components

- Section 3 outlines and assesses:
 - a. the development of the Programme Strategy
 - b. priority axes and specific objectives.
 - c. horizontal principles.

Part 3: Programme Coherence

- Section 4 considers the external coherence of the Programme including:
 - a. Europe 2020.
 - b. Relevant EU programmes and policies.
 - c. Domestic policy.

Part 4: Indicators and Implementation

- Section 5 reviews the Programme's approach to:
 - a. Resources.
 - b. Outputs and results indicators and their relation to the intervention logic of the Programme.
 - c. Programme management and implementation.

¹ Throughout this report, the term 'Programme' is used to refer to the NSRP 2014-2020 Programme itself. The term 'Operational Programme' or 'OP' refers specifically to the document which defines the Programme.

Part 5: Strategic Environmental Assessment

- Section 6 provides an introduction to the objective of the report, the programme context and the report structure.
- Section 7 reviews the environmental context of the North Sea Region Programme. This
 includes consideration of the environmental performance of the INTERREG IVB NSRP 20072013, an overview of the priorities of the draft programme for 2014-2020, and a review of
 relevant environmental strategies, programmes and policies.
- Section 8 examines the environmental baseline and trends within the countries participating in the NSRP area.
- Section 9 identifies strategic environmental issues, comprising the four themes of biodiversity/ecosystems, energy and resource efficiency, climate change and marine pressures.
- Section 10 presents an environmental assessment of the new programme. Following a
 description of how alternative scenarios were considered within the programming process, the
 programme Vision and Strategy, Priorities and Objectives are subjected to an environmental
 appraisal. Thereafter, the report discusses likely significant effects on the environment,
 measures envisaged in preventing adverse effects, and potential indicators for monitoring
 environmental effectiveness.

Part 6: Conclusions

- Section 11 draws together the draft final conclusions of the ex ante evaluation.
- Annex

PART 1: APPROACHES AND METHODOLOGY

Ex Ante Eval	luation of the Nor	th Sea Region	Programme	

1. EVALUATION APPROACH AND METHODOLOGY

The ex ante evaluation has been conducted in accordance with DG Regio Guidelines on Evaluation Methods.² The new guidelines for the 2014-2020 period follow the 'theory of change' approach.³ This requires programme development to consider a number of key questions:

- What does the programme aim to influence/change?
- How can it be ensured that interventions will contribute to achieving the objectives of the programme?
- How does the programme contribute to intended or observed outcomes?
- How will it be evident whether and when the programme has been successful?⁴

More specifically, according to DG Regio guidance, the main tasks of an ex ante evaluation are grouped into five components.

1. Programme strategy:

- a. the consistency of programme objectives, taking into account challenges and needs in relation to Europe 2020 objectives;
- b. the consistency of programme objectives with challenges and needs, and coherence, including the programme's internal coherence relation to other relevant instruments;
- c. linkages between supported actions, expected outputs and results; and
- d. the inclusion of horizontal principles

2. Indicators, monitoring and evaluation:

- a. Relevance and clarity of proposed programme indicators;
- b. Quantified baseline and target values;
- c. Suitability of milestones; and
- d. Administrative capacity, data collection procedures and evaluation.
- 3. Consistency of financial allocations
- 4. Contribution to Europe 2020 strategy
- 5. Strategic Environmental Assessment

This is reinforced in the Common Provisions Regulation which state that ex ante evaluation shall appraise:⁵

⁴ ibid

² CEC (2013a) Monitoring and Evaluation of European Commission Policy: Guidance on Ex Ante Evaluation, CEC: Brussels http://ec.europa.eu/regional_policy/sources/docoffic/2014/working/ex_ante_en.pdf>

³ Barca, F an McCann, P (2011) Outcome Indicators and Targets Towards a New System of Monitoring and Evaluation in EU Cohesion Policy, CEC: Brussels

http://ec.europa.eu/regional_policy/sources/docgener/evaluation/performance_en.htm

- a) the contribution to the Union strategy for smart, sustainable and inclusive growth, having regard to the selected thematic objectives and priorities, taking into account national and regional needs;
- b) the internal coherence of the proposed programme or activity and its relation with other relevant instruments:
- c) the consistency of the allocation of budgetary resources with the objectives of the programme;
- d) the consistency of the selected thematic objectives, the priorities and corresponding objectives of the programmes with the Common Strategic Framework, the Partnership Contract and the country-specific recommendations under Article 121(2) of the Treaty and the Council recommendations adopted under Article 148(4) of the Treaty;
- e) the relevance and clarity of the proposed programme indicators;
- f) how the expected outputs will contribute to results;
- whether the quantified target values for indicators are realistic, having regard to the support from the CSF Funds envisaged;
- h) the rationale for the form of support proposed;
- i) the adequacy of human resources and administrative capacity for management of the programme;
- j) the suitability of the procedures for monitoring the programme and for collecting the data necessary to carry out evaluations;
- k) the suitability of the milestones selected for the performance framework;
- the adequacy of planned measures to promote equal opportunities between men and women and to prevent discrimination;
- m) the adequacy of planned measures to promote sustainable development.
- n) measures planned to reduce the administrative burden on beneficiaries.

1.1 Intervention Logic

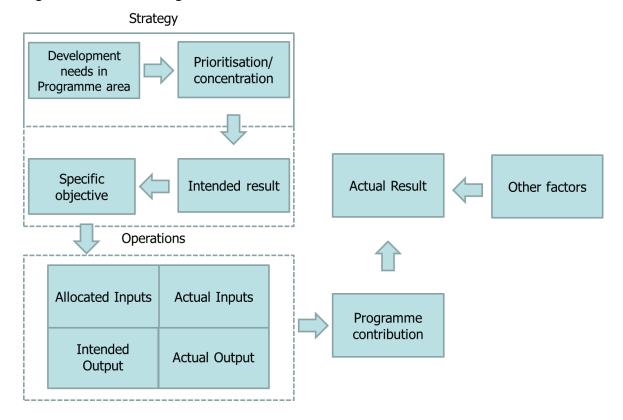
EU regulations⁶ and EC guidance place particular emphasis on Programmes delivering results in line with the Europe 2020 Strategy, and the need for a clear 'intervention logic'. Figure 1 sets out an overview of the European Commission's understanding of an OP intervention logic.⁷

⁵ CEC (2013 b), Regulation (EU) No. 1303/2013 of the European Parliament and of the Council laying down Common Provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund covered by the Common Strategic Framework and laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1083/2006, COM/2011/0615 final - 2011/0276 (COD).

⁶ CEC (2013a) op cit

⁷ Accompanying guidance highlights the added value of 'logical framework' to clarify the intervention logic. Such a tool demonstrates the causal links between the intended results and results indicators and the planned types of actions and output indicators.

Figure 1: Intervention logic⁸



Linked to Commission's expectations, a key aspect of the role of the ex ante evaluation is to assess whether 'operational programmes clearly articulate their intervention logic and can demonstrate their contribution to the Europe 2020 strategy'. Thus in addition to commenting on technical requirements and the Programme's alignment with regulations, the evaluation is expected to comment on the proposed intervention logic, identifying, for example, when the logic is not sound or when the effect of interventions are deemed insufficient.

The Programme's 'intervention logic' should run through the Programme as a whole, as well as through specific interventions and operations, see Figure 2. As such, the intervention logic has been considered throughout the evaluation process, as will be reflected in this report.

⁸ CEC (2014) Guidance Document on Monitoring and Evaluation: European Regional Development Fund and Cohesion Fund http://ec.europa.eu/regional_policy/sources/docoffic/2014/working/wd_2014_en.pdf

⁹ CEC (2013a) op cit



Figure 2: Integrating the intervention logic in Programmes

- 1. Identification of the development needs and challenges The intervention logic should address specific national and regional development needs in order to ensure that the Programme makes a maximum contribution to the Europe 2020 strategy. The added challenge for territorial cooperation programmes (in particular transnational programmes) is to find a compromise between the many challenges that the different regions face.
- 2. Selection of thematic objectives and investment priorities Once the Programme has identified relevant development needs and selected funding priorities, it should select appropriate thematic objectives and investment priorities out of the full thematic menu set out in Article 9 in the Common Provision Regulation.¹⁰ The selection must be consistent with thematic concentration requirements. As a general rule, a Priority Axis shall correspond to one thematic objective and comprise of one or more investment priorities of that thematic objective.¹¹ A different priority structure is justified if it increases impact and effectiveness in a thematically coherent integrated approach.¹²
- 3. The establishment of specific objectives Specific objectives will be formulated under the selected investment priorities, which are appropriate for the specific national and regional context. Specific objectives must reflect change, including the direction of change, which the Programme aims to achieve. This change should be as specific as possible so that the impact of the intervention can be evaluated.
- 4. **Policy coherence -** In order to maximise outputs and results, interventions should be 'coherent' with their external policy environment, complementing and adding value to existing interventions.
- 5. **Outputs and results** Output indicators are intended to capture progress made in Programme implementation and must reflect direct activities of the Programmes interventions.

¹⁰ CEC (2013b) Article 9.

¹¹ Article 96 CPR

¹² ibid

Result indicators are linked to specific objectives. Clear result indicators facilitate understanding of the problem being addressed and will facilitate a later assessment of whether or not specific objectives have been attained. The results sought by the programme can be attained in different ways. Therefore, a clear analysis of the most effective actions to achieve the result is required. The programme designers must reflect on which factors they plan to affect and which types of actions. They should therefore undertake to achieve the intended results. Possible external factors that could influence the intended results should be identified.

6. **Delivery and implementation** – effective and efficient management and implementation systems have to be in place in order to deliver, monitor and evaluate outputs and results.

1.2 Approach

As foreseen in the ex ante evaluation tender and inception report, the work undertaken by the evaluation team was based on the following elements:

- submission of briefing notes and evaluation reports;
- constructive participation in meetings;
- liaison with environmental authorities in each of the participating countries (for the SEA);
- participation in Programme's annual conference and consultation event;
- critical assessment of the various elements of the programme document; and
- on-going liaison by ICT between the EPRC project team and the NSRP drafting team.

The evaluation team aimed to offer inputs on various elements of the programming at relevant points. Formal written outputs from the ex ante produced as follows:

- Inception Report (March 2013)
- Strategic Review (March 2013)
- Thematic Briefing Paper (May 2013)
 - o Theme 1
 - o Theme 4
 - o Theme 5
 - o Theme 6
- Ex Ante Interim Report (September 2013)
- First draft SEA Report (September 2013)
- Ex Ante Paper on Programme Coherence (October 2013)
- Ex Ante discussion note in indicators (January 2014)
- Second draft SEA report (January 2014)
- Ex Ante up date paper (February 2014)
- Draft Final SEA report (March 2014)
- Ex Ante up date notes
 - o October 2013
 - November 2013
 - o March 2014
 - o May 2014
- Final Ex Ante Evaluation Report -version 1 (May 2014)
- Final draft SEA (June 2014)

These papers bring together lessons from previous programmes, research on regional development in the NSR area, contextual information on EU, national and regional policies, stakeholder views, guidance on the formal requirements for OPs, as well as offer critical feedback and analysis of programme drafts. The work was informed by documentary analysis, research interviews and comparative sources. The points raised in the evaluation papers, and through informal feedback, were noted by the drafting team. Not all the points raised were initially used or taken up. Where any notable differences in views or opinion arose these were openly discussed and acknowledged.

Through this process of regular reporting and feedback, and open debate on programming approaches and content, the ex ante evaluation has endeavoured to help inform the programme development process. Similarly, the Strategic Environmental Assessment has been a core part of the evaluation process and has also followed and fed into the Programme development process. SEA inputs have been available to inform both the overall ex ante process and the Programme development process. Insights have been provided during meetings, formal reports, and through informal feedback.

2. PROGRAMME PREPARATION

The programme drafting process was led by the Programme Planning Steering Group (PPSG), comprising of national and regional representatives of all of the NSRP countries, and representatives of the Programme Secretariat. The final decisions taken by the PPSG were informed by two drafting groups, the content group and administration group. A drafting team, based at the programme secretariat, was responsible for drafting the various sections of the Operational Programme and submissions for the content and administration groups.

The Programme preparation process was initiated with considerable drive. The core drafting team undertook a lengthy and detailed analysis of the performance of the current Programme, past experience and strategic policy context. An overview of developments in the Programme area was also included. This information was presented in a Strategic Orientation Report (SOR). A related process was undertaken by the ex ante evaluation team. The resulting ex ante Strategic Review highlights requirements for the 2014-2020 programming period and provides an overview of the policy and regulatory context for the programming process.

As the drafting process progressed, both reports provided information for the various sections of the Operational Programmes and a solid base of information to draw upon during the discussions of the Programme's content group and PPSG. As well as considering the Programme context, the content and administration groups' discussions remained firmly anchored in the EU regulations for ETC programmes. However, it must be recognised that the prolonged uncertainties regarding the precise content of the EU Regulations led to delays and some difficulties for the Programme drafting process.

Consensus on the rationale, focus and specific content of the 2014-2020 Programme took time to emerge and was the subject of valuable discussion. However, as the discussion progressed, ideas and thinking were gradually refined and momentum on drafting key sections of the Programme built.

This work contributed to the development of OP text, structured in line with the template provided for European Territorial Cooperation Programmes, ¹³ which is the key reference point for this report.

Key to driving the Programme drafting process forward was a sequence of regular meetings, see Table 1. In advance of each meeting the drafting team prepared briefing papers and circulated draft sections of the OP.

Table 1: Planning Meetings

	Month	Date	Meeting	
	April	25	Administration Planning Group - Brussels	
2012	October	10	Administration Planning Group - Hamburg	
20	September	4-5	Content Planning Group - Malmö	
	November	21	PPSG - Sint-Laureins, Flanders	
	February	20	Administration Planning Group – Brussels	
	March	19 - 20	Content Planning Group - Silkeborg	
	April	24	Administration Planning Group – Aberdeen	
	May	16	Content Planning Group - Copenhagen	
m	June	4	PPSG - Viborg	
2013	September	5-6	Content Planning Group – Copenhagen	
	October	23	Administration Planning Group - Bergen	
	November		Content Planning Group – Copenhagen	
	November	14	PPSG - Copenhagen	
	December		Content Planning Group - Hamburg	
	December		Administration Planning Group - Hamburg	
	February	17-18	Administration Planning Group - London	
	February	18-19	Content Planning Group - London	
2014	March	18-19	PPSG – London	
20	May	13-14	Administration Preparation Group – Edinburgh	
	May	13-14	Content Preparation Group - Edinburgh	
	June	3-4	PPSG – York	

Another important element of the Programme development process was consultations on the future direction, content, management and implementation of the Programme. Key aspects of the process are set out in Box 1. Programme consultation events were complemented by numerous national consultation and partner engagement events and meetings, which are detailed in the OP text.

Box 1: Consultation elements

- An initial consultation exercise with programme partners on area needs and potential areas of intervention.
- An on line consultation exercise was undertaken and received approximately 280 responses.
- National consultation events have been held, e.g. in the Netherlands.

¹³ CEC (2014) Commission Implementing Regulation (EU) No 288/2014 of 25 February 2014

- During the Programme's annual conference in Halmstad, Sweden (June 2013) consultation sessions and workshops were held on the key themes of innovation, transport and the environment.
- Extensive consultation involving national partners, as detailed in OP text
- A Strategic Environmental Assessment consultation was conducted from April to June 2014, with the SEA report and non-technical summary published on the NSRP website.
- Formal consultation period (ending June 2014)

The results of the consultation exercises were analysed in considerable detail and disseminated by the drafting team. Partner feedback has informed various aspects of the decision making process, as will be noted in subsequent sections of this report. In addition to consultation exercises, it is useful to note that input from key stakeholders was integrated through other means, e.g. a number of National Contact Points (NCPs) from the 2007-13 NSRP are involved in both content and administration planning groups, as are members of the secretariat. This allows the programming process to draw on considerable practical operational experience. The evaluation team were also invited to participate in content group meetings, relevant information was freely circulated to the team and ad hoc exchanges between the evaluators and drafting team were regular and easily arranged.

Overall, as this discussion has highlighted, the Programme Authorities have undertaken a number of activities and event to gain partner input, which has gone on to inform the decisions made. This work has all contributed to the development of an OP, developed in line with the template provided for European Territorial Cooperation Programmes.

PART 2: STRATEGY COMPONENTS

Ex An	te Evaluation of the Nor	th Sea Region Program	me	

3. PROGRAMME STRATEGY, PRIORITY AXES, SPECIFIC OBJECTIVES AND HORIZONTAL PRINCIPLES

3.1 Context

The OP is required to set out a programme strategy for the cooperation programme's contribution to the Union strategy of smart, sustainable and inclusive growth. This must include an identification of needs addressing the challenges within the Programme area and a justification of the Programme's choice of thematic objectives and corresponding investment priorities.¹⁴

The Operational Programme is also required to set out a description of each of the Programme's Priority Axes and accompanying Specific Objectives. The Priority Axes must fit within one thematic objective, as a general rule. The specific objectives must be consistent with, and fit within, the selected investment priority of the relevant thematic objective. They must also be shown to be necessary to address the specific development needs in the programme area. As such, the specific objectives are keys to the 'intervention logic' of the Programme, as it is here that the results that are sought are formally established.

As well as establishing and justifying the Programme's specific objectives, the Programme must also set out a description of the type of actions to be financed and their expected contribution. This involves a description of the types of interventions planned and how these interventions will contribute to the specific objectives, including, e.g. the identification of the main target groups, specific territories, and types of beneficiaries. A brief description of how operations will be selected should also be included. The principles applied should help to ensure the selection of good quality operations that will help to meet the Programme's objectives and deliver results.

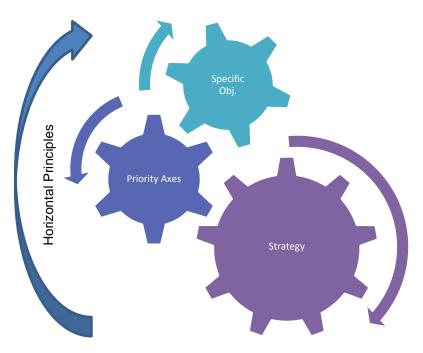
In addition, the OP is required to set out a description of specific actions to ensure the horizontal principles of sustainable development, equal opportunities and non-discrimination will be taken into account in the selection of operations, and of specific actions to promote equal opportunities and prevent discrimination.

Each of these sections of the OP is strongly interrelated, Figure 3.

¹⁴ CEC (2013c) Regulation (EU) No 1301/2013 of the European Parliament and of the Council of 17 December 2013 on the European Regional Development Fund and on specific provisions concerning the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006

¹⁵ The approach to combine investment priorities from different thematic objectives should only be used 'where appropriate in duly justified cases' CEC (2103b)

Figure 3: Programme Strategy



The strategy of the NSRP Programme sets out the aim to "embed greater cooperation in working practices across the North Sea Region (NSR) as a way of tacking joint challenges, pooling expertise and building lasting links between businesses and institutions throughout the NSR." The NSRP has been developed around four inter-linked priorities, plus a fifth technical assistance priority, and nine specific objectives, Figure 4.

¹⁶ NSRP, (2014) Draft Operational Programme North Sea Region Programme, 2014-2020 version 14-03-14, p. 4.

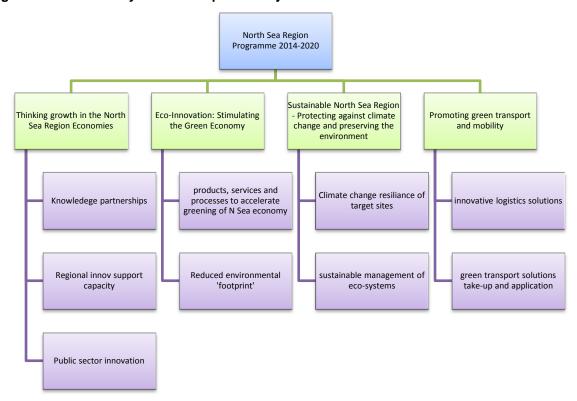


Figure 4: NSRP Priority Axes and Specific Objectives

The Programme sets out its overall approach to the horizontal principles by committing to compliance with national and EU legislation and policy, promoting the horizontal principles through planned programme interventions, and as part of programme and project implementation systems.

3.2 Developing Programme Focus

The development of the main strategic elements of the Programme was an incremental and evolutionary process. In refining the Programme's overall strategy and focus, the drafting team, content group and PPSG faced a number of challenging questions, for example: to what extent should the Programme change? How can the Programme deliver change? In a congested policy environment how can the Programme add value?

From the outset, past programme experience, combined with a strong sense of the opportunities to link and engage with Europe 2020 goals, informed thinking about the 2014-2020 Programme. Considerable work was also undertaken by the drafting team and ex ante evaluators to analyse the external policy environment.

Needs within the Programme area were also a foundation for initial thinking on the focus and direction of the Programme. Exactly how these elements were incorporated in the OP text was the subject of some discussion, e.g. with the evaluation team noting the strong emphasis on Europe 2020 in initial OP drafts and suggesting that area needs should be equally well covered in the OP text, in line with DG Regio's Aide Memoire (22.01.14).¹⁷ Ultimately, each of these bases of information, along with

¹⁷ DG Regio (2014) Preparation of 2014-2020 Cooperation Programmes, Aide Memoire on the Strategy and Management, Financial Control Arrangements, 22 January 2014.

active inputs from stakeholders, informed the strategic content of the OP; its intervention logic; strategic focus; and results orientation.

The need to focus efforts and deliver outputs and results, coupled with the relatively limited financial resources of the Programme, means that some challenging trade-offs and choices were made. The drafting team were faced with the additional challenge of having to work with 'evolving' Commission guidelines on key issues, such as the content of investment priorities. Key points of discussion and debate on the strategic elements of the Programme included:

- How to best convey the Programme's distinct rationale, focus and added value?
- How to narrow the, initially, broad range of themes selected?
- To what extent should the Programme set high-level ambitious goals in order to 'aim-high' and stimulate interest and strong projects? Conversely, with the results focus, to what extent should the Programme be pragmatic in its choices and limit its goals to areas of activity where it can effect change?
- To what extent can/should SMEs, innovation and ICT be explicit horizontal themes in the Programme?
- Should the Programme retain a transport priority?
- To what extent should addressing climate change be incorporated as a priority for the Programme?
- Innovation is a core theme across the whole Programme, how can each priority remain distinct and avoid overlaps?
- The Programme has a strong focus on economic growth, to what extent should it engage with the more 'social themes' in order to address needs in the Programme area?
- How to most efficiently incorporate the horizontal principles?

In terms of the horizontal principles, the Programme has a solid base to build on by drawing on past experience. In the course of discussion on how best to integrate and act on the horizontal principles the following points were raised.

- The strength of NSRP countries and regions in these areas.
- The robust national legislation and systems in place.
- Requirement to keep demands relevant and in proportion.
- Wish to avoid a tick box exercise that adds complexity for projects.

Throughout the drafting process the ex ante team has provided information and feedback. Key critical points raised that have helped to inform Programme content are summarised in Box 2.

Box 2: Key ex ante comments and feedback provided during drafting process.

Programme Strategy

- **Thematic focus:** the ex ante team has made a number of recommendations and inputs on this issue, including an extensive options paper on possible themes and activities to pursue.
 - At one point particular concerns were raised concerning the number of thematic objectives being pursued.
- Narrowing focus: As would be expected, early draft texts were considered general and too focused on
 the macro/strategic level and issues. It was stressed that while analysis/introduction to the strategy
 should acknowledge the large-scale development challenges facing the region, the strategy text must
 then go on to focus on what issues/aspects of these challenges the 2014-2020 NSRP can directly
 address. These issues needed to be given greater prominence in the OP strategy text.
- Value and importance of a robust, concise, well-presented area analysis: It was highlighted that, as
 well as forming a key part of the programme development process, an area analysis could help to
 improve the text of the draft OP. It was suggested that pulling together a single clear analysis of the
 programme area introduces the area at the outset and allows the descriptions of the Priority Axes to
 become shorter and more focussed.
- Emphasis on the distinct role of the Programme and what in particular the NSRP and transnational cooperation can do. The specific role of the NSRP should come across strongly in the OP text
- Developing text on 'coherence' with other Programmes. A considerable amount of work was undertaken on this issue, which could be better reflected in the OP text.
- Some text on lessons from previous programmes can function as a strong justification for selection of themes/interventions.
- **Comments on the writing style**, the overall style of writing in the draft texts was influenced by an initially very broad and ambitious focus.

Priorities and Specific Objectives

- Noted areas where due to overlaps proposed objectives could be usefully merged to deliver a stronger overall objective, in relation to Priority Axis 4.
- Specific points were made in relation to a lack of focus in some priorities.
- Concerns were raised about the number of thematic objectives covered in a single priority.
- The challenges of justifying and working with 'mixed' Priority Axes were noted.
- The issue of overlapping themes in the priorities and need to clarify some interventions.
- Clarity of wording and overall structure of the texts.
- Need for clearer text on target groups.

Horizontal principles

- Noted the domestic strengths in relation to the horizontal principles. By noting this strength and setting
 the Programme context, the proposed approach could be further strengthened, e.g. in the case of equal
 opportunities and the proposal to adhere to national regulations.
- Throughout a more 'process' based account how the horizontal themes are integrated in the Programme could be provided.
- The OP text could quite easily include additional references to practical Programme actions to support the horizontal principles.

• Equal opportunities, in particular, came across simply as a project requirement, as opposed to something that is embedded in the Programme and considered throughout.

As the following assessment will illustrate, in many cases, these points were taken on board. The result has been a gradual and on-going refinement of the strategy, priority axes and specific objectives taking into account a wide range of inputs and arguments.

3.3 Ex Ante Assessment

As well as ensuring technical compliance with the requirements set out in Commission guidance, this ex ante assessment has focussed on the following broad requirements and key questions.

Programme Strategy

- Result focussed?
- Justified?
 - o Is the strategy rooted in the needs of the Programme area?
 - Does the strategy engage with Europe 2020 and align with relevant frameworks and agreements?
 - o Does the strategy draw and build upon past experience and progress?
 - o Does the strategy reflect stakeholder input?
- Does the Programme have a clear, strategic focus that is the basis for a solid 'intervention logic'?

Priority Axes and Specific Objectives

- **Focussed?** Are the Priority Axes sufficiently selective and focussed on key areas where the Programme can deliver outputs and results? Is the Programme targeting areas where it can deliver meaningful change?
- **Relevant?** Are the Priority Axes and specific objectives in line with the identified needs in the programme area?
- Aligned? Is there alignment with the relevant thematic objectives and investment priorities?
- **Coherent?** Are the Priority Axes and Specific Objectives 'internally coherent', are there complementarities and synergies? Could there be negative overlaps?
- **Selective and targeted**? Is there a robust description of the principles applied to ensure the selection and targeting of good quality projects?
- Well communicated? Are the Priority Axes and Specific Objectives clear and easily understood?

Horizontal Principles

- How have the horizontal principles been taken into account in the preparation of the Programme?
 - o How will the Programme contribute to the horizontal principles?
 - o What specific actions has the Programme taken to address the horizontal principles?

3.3.1 Strategic focus

The Programme strategy sets out an overall vision for the Programme that captures the ambitions of programme stakeholders and development needs and opportunities in the area. However, this has to be accompanied by practical, pragmatic action. Considerable efforts have been put into developing a

strong, narrower focus to the 2014-2020 NSRP. Refining focus and selecting some themes, priorities and objectives over others is a challenging process, particularly for transnational territorial cooperation programmes covering large areas with diverse needs in a number of countries and regions. Nevertheless, the Programme has endeavoured to narrow its focus onto areas where it has scope to maximise its results. The Programme proposes to work within four thematic objectives, which is the maximum recommended by the Commission. These are thematic objective 1, 5, 6 and 7.

As has been noted, a wide range of processes and analyses were used to inform discussions and debates on the overall programme strategy, and specifically which Thematic Objectives and Investment Priorities the Programme to work within. Each of the Thematic Objectives set out in the CSF were considered in detail, primarily during content groups discussions, but also via an options paper prepared by the ex ante evaluators and through consultation exercises. As part of this process during general and focus group discussions in the Programme content group, the thematic objectives were ranked in terms of their relevance.

Each of the eleven themes proposed by the Commission were considered in terms of their links to the 2007-13 Programme, needs identified in the SWOT/analysis discussions for the new Programme, partner views, and relevance to EU and domestic policy. As Annex 1 highlights, the nature of the Commission's themes means that each one of the thematic objectives is in some way relevant to the Programme area and touches upon fields of activity where the Programme has been active in the past. However,

- some (Themes 8, 9, 10) cover areas of intervention are likely to be the direct focus of other interventions, e.g. ESF programmes;
- in other themes, the Programme already has a strong presence and the themes will be likely to be embedded elements of Programme, thus may not require focussed interventions (Theme 2, Theme 3 aspects of theme 7); and
- in other cases, the scope for the Programme to deliver results and address the issue in question are limited, due, in particular, to the limited financial resources of the Programme (elements of Theme 7).

Based on the research undertaken, feedback from national representatives and discussions at the content group meetings, five themes were identified as offering particular potential for the NSRP and were explored further:

- Thematic Objective 1 Strengthening research, technological development and innovation;
- Thematic Objective 4 Supporting the shift towards a low-carbon economy in all sectors;
- Thematic Objective 5 Promoting climate change adaptation, risk prevention and management; and
- Thematic Objective 6 Protecting the environment and promoting resource efficiency.
- Thematic Objective 7 Promoting Sustainable Transport and Removing Bottlenecks in Key Network Infrastructures

This selection went on to be narrowed further to Themes 1, 5, 6, and 7. Focussing on just a limited number of themes does 'leave out' some topics that could address significant shared development concerns for the NSRP area. For example, evaluation analysis and partner feedback highlight a level of interest in:

- accessibility (including transport and access to ICT),
- social inclusion;
- rural-urban linkages; and
- SMEs.

Evidence suggests that aspects of these broad themes remain relevant to the Programme. As a result, key projects within these areas of activity could still be a part of the NSRP, but may be funded under 'other' priorities, such as innovation. For example, a project funded under an innovation priority could address environmental protection or social inclusion. Thus, the Programme need not be 'closed' to activities in these areas.

The decision not to pursue Thematic Objectives 2, 3, 4, 8, 9, 10 and 1 was primarily determined by the need for a strong results orientation. Key general considerations informing the choice not to pursue these themes include: the scope of the Programme to deliver results and effective projects, past experience in key fields, emerging opportunities in the programme area, and 'fit' with existing policies and programmes. Particularly, close consideration was given to thematic Objective 4 'Supporting a shift towards a low-carbon economy'. The NSRP performs extremely well in this field and has considerable resources in terms of expertise and natural resources for developing renewable energy, and is a world leader in terms of developing and applying green technology and renewable energy. However, it was felt that the selected themes, 1, 5, 6, and 7 could accommodate relevant likely actions in this field. It was also noted that renewable energy and green technologies are the focus of an extremely large number of dedicated policies, making it a congested policy area.

Annex 1 aims to draw together the key findings of the processes and discussions involved in selecting thematic objectives.

3.3.2 Aligned with investment priorities

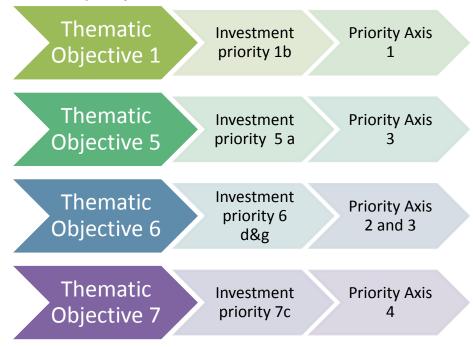
Following the selection of Thematic Objectives, a similar process was undertaken to identify the most appropriate investment priorities to work within. As a result of internal evaluations and consultation exercises, the drafting team had a strong sense of what the Programme could deliver in the 2014-2020 Programme. Additionally, the ex ante evaluation team under took an analysis of links to the draft investment priorities (Summarised in Annex 1 and presented in full in EPRC Thematic Briefing Paper 2013). These analyses identified the following links summarised in Figure 5.

IP 1(b) - strengthening research, technological development and innovation by: promoting
business investment in R&I, developing links and synergies between enterprises, research
and development centres and the higher education sector, in particular promoting investment
in product and service development, technology transfer, social innovation, eco-innovation,
public service applications, demand stimulation, networking, clusters and open innovation

through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies. – Link to Priority 1, specific objectives 1-3 through emphasis on business (epscially SME) links and knowledge partnerships and new products and services.

- IP 5(a) promoting climate change adaptation, risk prevention and management by: supporting investment for adaptation to climate change, including ecosystem-based approaches. Link to Priority 3, specific Objective 1 targeting climate change resilience.
- IP 6(d) preserving and protecting the environment and promoting resource efficiency by: conserving, protecting, promoting and developing natural and cultural heritage. Link to Priority 3, Specific Objective 2 through developing new methods for long-term sustainable management of ecosystems.
- IP 6(g) preserving and protecting the environment and promoting resource efficiency by: supporting industrial transition towards a resource- efficient economy, promoting green growth, eco-innovation and environmental performance management in the public and private sectors. Link to priority 2, e.g. through links to adoption and application of low-carbon energy and green technologies.
- IP 7 (c) promoting sustainable transport and removing bottlenecks in key network infrastructures by: developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility. Link to priority 4, e.g. through improved logistics and green transport solutions.

Figure 5: Investment priority links



The prolonged lack of any finalised EU regulations left the Programme drafting team in a difficult position when it came to identifying precise links to investment priorities. In the course of debates on the Regulations, the exact wording, number, and focus of some of the proposed investment priorities changed, e.g. in the case of Investment priority 6 (g). However, clear links are apparent between the agreed thematic objectives and investment priorities and the actions proposed. In relation to previous OP drafts the evaluation team noted some concerns over how the text on Thematic Objective 6, investment priority g was being interpreted. However, since then it is acknowledged that the overall approach to priorities under this theme changed in the final approved regulations.

3.3.3 Justification of strategy

In terms of the justifications for the proposed strategy, a strong case can be made for the overall approach. A well-justified strategy for ETC programmes must draw on a number of key elements and link them to proposed areas of intervention, thus building the initial elements of a robust, well-reasoned intervention logic, see Figure 6.

- The EC regulations and requirements Europe 2020 and the accompanying regulations;
- Area needs an assessment of development opportunities and challenges in the transnational region;
- Stakeholder views input from Member States and stakeholders (regions, prospective beneficiaries);
- Past experience builds on positive elements of the past programmes and progresses; and
- Policy context 'fits' in the wider policy environment.



Figure 6: Elements contributing to the Programme strategy

As the following points explain, the Programme has used these strands to develop a strong base of information to inform and justify its focus.

(i) Area needs

Needs in the Programme area were implicit and embedded in the Programming process. The Programme drafting team were keen to keep the 'area analysis' aspect of the programme preparation process in proportion, and in line with the focus of emerging the Programme. Overall, the aim was to develop a focussed and functional basis for decision making, as opposed to a lengthy, wide ranging 'wish list' of potential interventions. The constraints of word limits in the OP template were also noted, and constrained the level of detail and analysis that could be incorporated in the main text, although annexes were used.

An account of needs in the Programme area is set out in the OP text, which covers key relevant points. Additional and more detailed analyses were also developed as part of the drafting process, e.g. in ex ante evaluation thematic reviews, the strategic orientation report, thematic papers on key areas of intervention prepared by the drafting team.

As well as helping to inform and justify the programme strategy, the various texts developed provided useful evidence to support the selection of specific areas of intervention and set goals and targets for the Programme. Table 2 illustrates links between identified needs and the Programme objectives.

Table 2: Links to Area Potentials and Challenges

	Priority	Selected identified Challenges and Potentials
1	Thinking Growth: Supporting Growth in N. Sea Region economies	 Need to commercialise innovative ideas Need for improved knowledge exchange Strong capacity in key sectors Need for innovation in SMEs Global competition
2	Eco-innovation : Stimulating the green economy	 Strong performance in innovation Unsustainable energy and industrial practices Threat of short-term economic pressures overriding sustainable approaches Economic potential in 'green economy' Expertise and knowledge in the 'green economy' Number of natural landscapes and resources Awareness of the need for environmental action
3	Sustainable N. Sea Region: Protecting against climate change and preserving the environment	 Vulnerable and degraded habitats and ecosystems Awareness of the need for environmental action Know- how and experience in of relevant sectors and technologies. Vulnerable coastlines and waterside areas
4	Promoting Green Transport and Mobility	 Presence of international trade hubs and routes Good infrastructures and know how of green transport opportunities Persistent reliance on conventional forms of transport Strong research capacity on transport issues Some technology gaps Challenges faced by remoter regions Route congestion

(ii) EU Strategic Frameworks

A key element of the Programme's overall strategy is how it links to EU strategic frameworks and goals. Crucially, the Programme is required to set out a description of its contribution to the delivery of

the European Union strategy for smart, sustainable and inclusive growth and the achievement of territorial cohesion', Europe 2020.

The scope for the NSRP to directly impact on Europe 2020 targets is, in some respects, limited due to the comparatively small-scale of the Programme's financial resources and large programme area. However, Europe 2020 was at the heart of the programming process. Europe 2020 goals and targets were used to benchmark the programme area and justify programme focus. Thus, the Programme took a proactive approach to looking at how it can work in line with the principles set out in Europe 2020 and can contribute *towards* 2020 goals and targets, by:

- identifying specific niche areas where it has a distinct role to play;
- acting to initiate and stimulate interventions with longer-term and larger-scale results; and
- setting examples that can be applied across the EU.

In doing so, the Programme will make its own, valuable contribution to EU strategic goals and draft programme priorities link well to the Europe 2020, see Table 3.

Table 3: Engaging with Europe 2020

EUROPE 2020	Examples of NSRP objectives
Smart Growth	 Develop new of improved knowledge partnerships between businesses, knowledge institutions, public administrations and end users Enhance regional innovation support capacity Develop demonstrations of innovative and/or improved transport and logistics solutions
Sustainable Growth	 Promote the development and adoption of products, services and processes to accelerate the greening of the N. Sea Economy Stimulate the adoption of new products, services and processes to reduce the environmental footprint of regions around the North Sea. Demonstrate new and/or improved methods for improving the climate resilience of target sites Develop new methods for the long-term sustainable management of the North Sea Region. Stimulate the take-up and application of green transport solutions for regional freight and personal transport
Inclusive Growth	 Stimulate the public sector's to generate innovation solutions for improving public service delivery Stimulate the take-up and application of green transport solutions for regional freight and personal transport

(iii) 'Fit' with the external policy environment

The NSRP programme is operating in a dynamic and congested policy environment, see Figure 7, and must 'set itself apart'. However, the Programme can also maximise its influence and results through synergies and by actively engaging with its policy environment. With this in mind, the Programme has assessed thematic links across a number of areas of activity, as will be discussed in Part 3 of this report. This work has also helped to inform, and reinforce the Programme's focus, by:

- highlighting areas where the Programme has a distinct role to play and can set its self apart;
- looking at ways to complement other policies and priorities; and
- considering cooperation/collaboration to strengthen beneficial outputs and results.

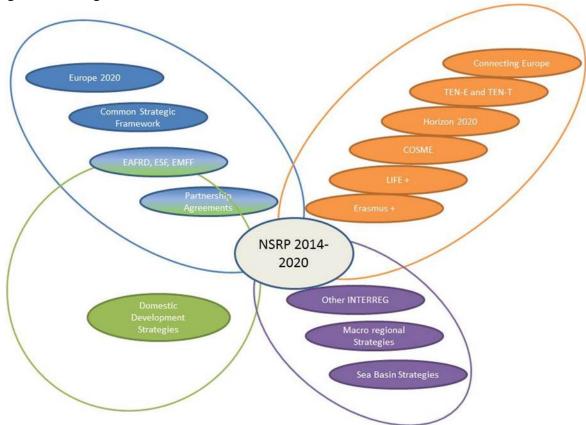


Figure 7: Strategic Frameworks and the NSRP

(iv) Lessons from past programmes

Drawing on lessons from past experience was another important element in the strategy development process. The evaluation team highlighted a key development 'resource' within the Programme areathe long-standing experience of cooperation between partners. More specifically, lessons from the Programme's own evaluations were drawn upon. As well as highlighting areas where the Programme can improve, evaluations and internal assessments of the current and previous evaluations North Sea Region Programme noted the following experiences and issues, see Table 4.

Table 4: Drawing on past experience¹⁸

Strengths to build on and lessons to draw on

- High commitment rates and high project numbers
- · Good geographic spread of partners
- Role of private sector in some projects
- Added value of NSRP projects illustrated
- Innovative responses to implementation challenges
- Projects based on the shared or complementary needs of all partners
- Results should be based on joint action
- Importance of research, but also practical applications
- Strong links to European policies
- Results should be based on joint action
- Scope for policy influence from projects
- Importance of focus in projects
- Rethinking 'standard approaches'
- Piloting two step application to strengthen final applications
- Simpler rules
- Simpler administration

To complement this work the evaluation team has also noted areas of thematic relevance for the Programme which could be carried forward from the 2007-13 Programme, see EPRC Thematic Options Papers 2013 and Box 3.

¹⁸ McMaster I et al (2013) Strategic Review of the North Sea Region Programme, EPRC, University of Strathclyde, Glasgow. NSRP (2014) North Sea Region Operational Programme, p, 8-10.

Box 3: 2007-13 NSRP areas of thematic relevance

The Programme has demonstrated particular strengths in the fields of R&D and innovation in the current programme period. Innovation has effectively been a cross cutting theme across the majority of projects. However, particular sectors of note include:

- renewables;
- · energy efficiency;
- · maritime industries;
- new transport solutions; and
- new solutions for public services/public sector.

Environmental protection and change are some of the key development concerns facing the North Sea Region. The impacts of climate change and pollution are economic development concerns, as well as environmental and social issues. The North Sea has rich wildlife habitats, extensive coastlines and valuable marine resources and environments that must continue to be protected and preserved. All NSRP countries have an advanced system of regulating and monitoring environmental issues. ¹⁹ Equally, the Programme area includes major population and industrial centres, which exert pressure on fragile environments and drive consumption of resources.

Climate change mitigation and adaptation is an area of particular concern, linked to the long areas of coastline and the particular threats to part of the programme area from, for example, sea-level rise. Yet for the NSRP within these tensions and challenges are substantial strengths and opportunities. The region is a leader in the field of developing, supplying and adopting low carbon technologies, and energy efficient technologies. New sources of renewable energy are being developed and applied across the region. The stimulus to cooperate on issues such as flood prevention and coastal management is substantial and has already resulted in major advances in mitigation of and adaptation to climate change.

The Programme has a well-established record across the spectrum of activities covered by the three 'environmental' thematic objectives set out by the Commission. The NSRP Strategic Orientation Report notes the Programme's particular contribution to:

- renewable energy,
- · water management,
- coastal management,
- management and prevention of marine pollution,
- · opportunities linked to biomass, and
- management of marine resources.²⁰

For the NSRP partner regions transport represents a critical element in driving forward economic growth through trade development. The Programme has a long and well-established background of working in this area of activity and has supported some very successful projects. The Programme's strengths in areas such as sustainable transport logistics are recognised. Looking to the future, key issues are:

- sustainable shipping;
- intermodal transportation;
- development of small ports; and
- safety issues.

Lessons from INTERREG Programmes more generally were also considered. In particular the evaluation team noted the following key issues: scope for improving the effectiveness of fund interventions through greater strategic focus and results orientation, with programmes seeking to ensure that projects become durable or even self-sustaining after the end of EU-funding; and scope for strategic coherence and alignment across funds and interventions in order to develop beneficial links and avoid overlaps.²¹

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¹⁹ NSRP (2007) North Sea Region Operational Programme 2007-13, NSRP

²⁰ NSRP (2013) op cit.

²¹ Panteia *et al.* (2010) *Ex post evaluation of INTERREG 2000-2006*, Final Report to DG Regio, Brussels; DG Regio (2010) European Territorial Cooperation, High Level Group Reflecting On Future Cohesion Policy, DG REGIO, Brussels., European Commission (2010) *Investing in Europe's Future: Fifth Report on Economic, Social and Territorial Cohesion*, Publications Office of the European Union: Luxembourg; European Commission (2010)

In undertaking these assessments, the Programme has drawn lessons from past experience and demonstrates a high degree of continuity with the 2007-13 Programme. This is particularly the case as the Programme is building on existing areas of strength where there is a known role for transnational territorial cooperation. In a number of cases, the areas of intervention fit well with reports produced by the 2007-13 Programme's 'cluster projects', which provided in-depth, forward looking assessments of opportunities and needs in key areas in the Programme area. The Programme's scope to promote, e.g., network-based activities and coordinated actions in key areas of common interest for the North Sea Region is particularly relevant in this context.

However, as well as retaining strong elements of the past programme, the NSRP also demonstrates a commitment to progress and move forward, e.g. by acknowledging the need for more tangible outputs from projects and the need to narrow the Programme's focus. For example, as has been noted, projects funded through the 2007-13 Programme are considered to be innovative, with the potential to inform policy and support change. This innovative aspect is one the Programme can capitalise on and runs throughout the Programme.

(v) Stakeholder input

In developing the Programme strategy, partner and stakeholder input were sought at various points, in the drafting process. Within this report, it is not possible to fully reflect the detail and extent of the input received. However some of the strategic issues referred to by partners are listed, see Box 4.

Box 4: Key stakeholder views on thematic focus

Innovation

- · Concrete results are favoured in the form of real products and services produced
- There is still a need to focus on innovation systems and in particular knowledge exchange mechanisms at different levels

Environment

- · Scope for links between environmental action and economic growth
- There was strong support for corrective action on pollution (6d) and especially climate change adaptation

Transport

- There was general support for maintaining a separate transport theme as a way of maintaining focus on an important sector for the region
- Several comments point to a need to differentiate NSR action on transport from other funds and identify a set of concrete outcomes that is expected
- Links to TEN-T were assessed as quite important but should not be focused on peripheral areas if this theme is taken up

Consultation processes and events gave stakeholders the opportunity to significantly influence the shape and scope of the future Programme. For example, at an early stage there were indications that

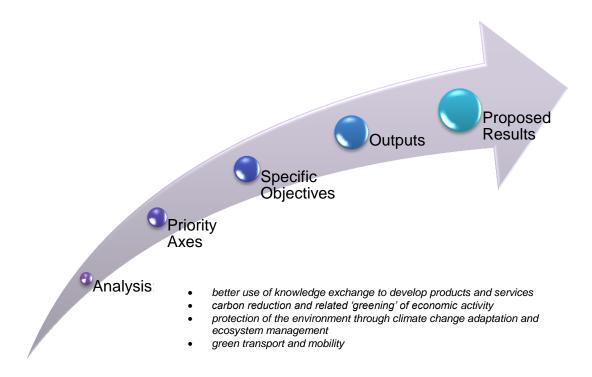
Conclusions of the Fifth Report on Economic, Social and Territorial Cohesion: The Future of Cohesion Policy, COM(2010) 642 final, Brussels.

the transport priority would not be included in the 2014-20 Programme. However, consultation with stakeholders and Member States made it clear that this was not desirable. Also, targeted feedback suggested that there was a wish to include climate change as a priority, which is now the case. As well as inclusions into the Programme, interestingly, stakeholder feedback also called for narrowing and greater clarity in the focus of the innovation Priority Axis.

3.3.4 Logical & Relevant

The Programme has built up an increasingly robust 'intervention logic', with the analysis set out in the strategy as the basis for the Programme's Priority Axes, Specific Objectives, outputs and results, see Figure 8.

Figure 8: Programme logic



The issues being addressed are ones of general concern and, as will be discussed, the focus of a wide range of other interventions and influences. However, past programme experience and the combined development strengths and needs in the Programme area mean the NSRP's aims to work in these areas are logical and relevant.

Taking the scope for the Programme to 'add value' alongside the wide range of other factors informing the Programme's strategy, the following points can be raised:

• The particular role/emphasis of innovation and innovative solutions is justified based on key strengths in the Programme area, the proven potential of the Programme to deliver 'pioneering' and innovative solutions and services, the scope for transnational cooperation to link areas expertise and demand, feedback from consultation events and coherence with EU 2020 and other key policies and frameworks.

- A strong emphasis on 'clean environment' and addressing the impacts of climate change is justified based on the clear need for environmental action/protection in the North Sea Region, the potential economic benefits to be gained from developing new 'green' technologies and environmental improvements, the particular strengths of, and need for, transnational territorial cooperation in this field, demand from Programme stakeholders, and coherence with EU 2020 and other key policies and frameworks. The region can capitalise on its position as a leader in the field of developing, supplying and adopting low carbon technologies, energy efficient technologies and responding to changing climatic conditions.
- Transport is another significant factor in developing economic growth and jobs in the North Sea Region. The variety of needs across the region is considerable. The region includes remote islands and regions in the economic core of the EU and at the centre of key transport hubs. Related to this is the potential importance of links between urban and rural areas. As well as key urban centres, the Programme area has large rural areas and hinterlands, which can be marginalised by other policy interventions with a strong urban focus. Marine transport is another significant, and distinctive, aspect of the Programme area. For the NSRP partner regions maritime transport represents a critical element in driving forward economic growth through trade development. The Programme has a long and well-established background of working in this area of activity and has supported some very successful projects.

3.3.5 Results oriented

The Commission's particular emphasis on selectivity, strategic focus and results orientation highlights the fact that the Programme had to consider interventions within a potentially narrow range of core areas. This could:

- maximise the Programme's scope to deliver change and work in areas where it makes a distinctive contribution;
- offer scope to build/intensify links with new partners;
- allow stakeholders to engage and 'fit' well in a focussed Programme with a clear purpose;
 and;
- could force existing partners to 'innovate' and push boundaries.

Yet, narrowing the focus of the Programme too far can raise concerns. The NSRP has to appeal to stakeholders from across the programme area. A very narrow focus on specific issues could limit the appeal of the Programme in some areas. The NSRP may not want to lose working links with existing partners. A narrow focus could also limit the Programme's capacity to adapt to sudden changes in the external environment and limits the fields of engagement with external partners. Striking a balance between these positions involved trade-offs and compromises.

In practice, the NSRP still aims to be active in a relatively wide range of different fields. Priority Axis Three - Sustainable North Sea Region – in particular covers a range of activities, spanning climate change resilience to eco system management. However, it is acknowledged that within the specific objectives, actions are focussed on key areas where the NSRP can be expected to have an impact, most notably through capacity building, exchange of knowledge and piloting new approaches.

Key to the Programme's results focus is a commitment to taking networking, KE and demonstrations beyond simply establishing the network or developing the tool and moving towards

dissemination/application/adoption/production, e.g. Priority Axis 1 Specific Objective 1 aims at improving the capacity of knowledge partnerships in the North Sea Region to deliver marketable product, service and process innovations. In other words the priority aims to move knowledge partnerships forward towards delivering innovations.

Through working on a transnational basis and across a variety of fields, the Programme has access to a diverse range of partners that are leaders in the field and have the scope to develop, and begin to apply, new approaches to key development concerns. This need to focus on the application and adoption of 'innovations' is supported by the findings of, for example, a 2007-13 NSRP cluster project which notes that "INTERREG innovations ... tend to stop in a certain stage of the innovation cycle ... Most innovations have successfully been developed and tested for the first time in the INTERREG projects. Unfortunately, after the pilot phases the project stops and the innovation cycle breaks." ²²

Additionally, a focus on solely on 'leading edge' innovation could be viewed as exclusionary and potentially overly focussed on research and development. However, the Programme can work to ensure that part of what it supports is links between 'high-level' know how and expertise, organisations that can 'apply' the ideas and concepts, and end users/ beneficiaries. Success will depend on capacity and interactions between a variety of public and private organisations. It draws on diverse skills and capabilities across smaller and larger companies, universities, public agencies, business and innovation and financial intermediaries. ²³ Working on this basis, territorial cooperation programmes, such as the NSRP, have already demonstrated their role in facilitating the mobility of information, which underpins innovation.

An increased emphasis on application and adoption is a progression for the NSRP. Crucially, the Programme has sought to identify specific ways in which the NSRP in particular can effect positive change and add value in ways that can be identified and attributed to the Programme. Figure 9 illustrates flow of connections leading to results.

While there is a generally strong focus on outputs and results coming across in the Priority Axes and Specific Objectives, there is some variation.

- Priority Axis three 'Sustainable North Sea Region', especially SO 3.1 could initially be viewed has having a strong knowledge exchange and networking focus, e.g. noting opportunities for exchange of knowledge on flood defences and urban planning and infrastructure to improve resilience to climate change, and less of the application of the knowledge.²⁴ However, on further reading of the SO description in the later sections of the OP text the Programme's more practical, results focus does come across more strongly.
- Similar points could be raised in relation to SO 3.2. Indeed the texts on both Objectives are closely linked.

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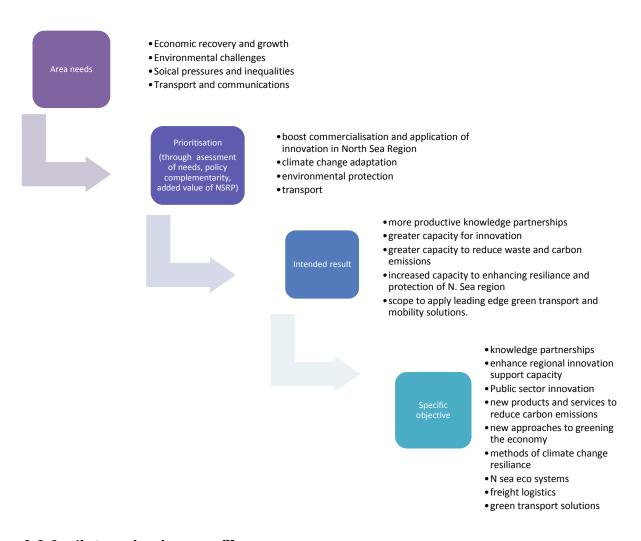
²² WaterCAP Final report 'One step beyond implementation of climate adaptation innovations: Experiences from the INTERREG IVb project WaterCAP' http://www.watercap.eu/NR/rdonlyres/47B39E94-8FCB-4F0F-AEE7-84B2ECD757E9/0/Report_WaterCAP.pdf

²³ Adapted from CEC (2012) Evaluation of Innovation Activities Guidance on methods and practices, CEC: Brussels, p. 7.

http://ec.europa.eu/regional_policy/sources/docgener/evaluation/pdf/eval2007/innovation_activities/inno_activities_guidance_en.pdf,>

²⁴ See p 21 od Draft OP text.

Figure 9: Needs - Results



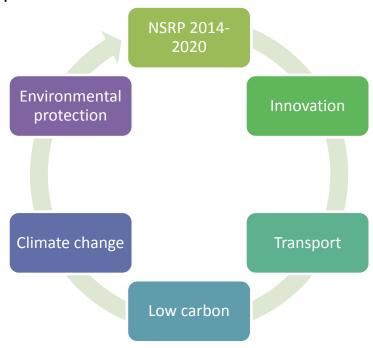
3.3.6 'Internal coherence'25

The evaluation is required to assess the relationship between the Specific Objectives of each Priority Axis, and between the Specific Objectives of the different Priority Axes. The aim here is to ensure that one area of intervention is not working against another and that possible synergies are recognised.

The priorities and accompanying objectives are strongly linked by their foundation in the Programme's response to Europe 2020. Therefore, they can be expected to work together in a complementary and coherent manner, for example see Figure 10.

²⁵ In this context internal coherence is understood as the relationship between the Specific Objectives of each priority axis, and between the Specific Objectives of the different priority axes.

Figure 10: Example of NSRP internal coherence



However, the ex ante team also noted the need to clarify and 'separate' the priorities and objectives. For example, potential overlaps with the proposed innovation investment priority were discussed. As a result, particular efforts were made to ensure that each of the Priority Axes and Specific Objectives make distinct contributions and are clearly defined. While there are recurring themes, such as innovation and green technologies, the drafting team worked to make clarifications to definitions and focus of the priorities and objectives. For example, the wording of Specific Objectives 4.1. and 4.2 was refined in order to make a clearer distinction between the emphasis on long-distance freight solutions and shorter-distance transport solutions. Similarly, wording has been added to clarify the focus of Priority Axes 1 and 2, which both have a strong focus on innovation.

There are some cases where the OP text has to be read closely in order to discern the exact separation between the Specific Objectives, e.g. within Priority Axis 2 products and services to promote green growth and reduced carbon emissions is a recurring, and interrelated, theme. However, there is a difference in focus between, on the one hand, wider actions to support greening the economy, and energy use on the other. More generally, the recurring themes of innovation and 'green approaches' could lead to a view that there could be overlaps across Priority Axes and Specific Objectives. Both are key development concerns for the region and by their very nature are crosscutting themes. However, the distinctions between the proposed interventions are clearer in the detailed descriptions of the potential actions and in relation to the outputs and result indicators.

3.3.7 Targeted

Actions supported – The sections of the OP outlining actions supported offer a large number of relevant and useful examples. The evaluation noted that it is useful to set out clear examples of actions to be supported. However, this should be kept in proportion. Too much detail could be seen as leading, and could be interpreted too literally by beneficiaries as a prescription of what the intervention will/ will not support. Further, excessive detail can obscure what the key, basic requirements/expectations are. The drafting team were keen to note that project partners also demand a level of detail. Additionally, especially with the Programme's efforts to deliver strong results-oriented projects, a clear detailed account is useful. However, the Programme should also be open to new ideas and the OP should be a clear, 'usable' reference document.

Selection – The Programme's proposed guiding principles for the selection of operations are a useful starting point for setting out expectations and understandings for project developers. In relation to previous drafts of the OP, the evaluation team noted that the requirements are relatively general, a clearer distinction could be made between specific selection criteria and general criteria (in some cases specific criteria could be interpreted as general and visa versa), and a simple listing of requirements could present the requirements more clearly. Revisions were made which have led to improvements. However, even greater clarity could be provided by providing 'key words' and a description, e.g.

- transnationality projects need to demonstrate a need to work transnationally....;
- result orientation project outputs should be
- area relevant projects must define the precise needs they address.

Also worth considering is whether factors such as innovation and value for money should be considered as general selection criteria.

Targeting - The priorities are expected to set out target groups. The draft texts refer to specific, and highly relevant groups and sectors within the text. However, it was recommended that for the purposes of clarity a more comprehensive overview of target groups could be presented, including the more 'obvious' groups such as local authorities, government agencies and NGOs.

3.3.8 Well-communicated?

Ideally, a lay-person should be able to quickly grasp what the Priority Axes and Specific Objectives are about. The priorities and objectives also must be well defined to avoid difficulties with identifying the scope for the Programme to have a 'concrete' tangible impact; clearly distinguishing the NSRP programmes from other Structural Funds programmes; publicising the programme and generating partner interest; and developing appropriate result and impact indicators.

Ex ante advice and input was provided on the structure and wording of, in particular, the strategic texts. Key points raised include the need to provide:

- Structure Provide coherent well-structured points;
- Clarity All points should be clearly explained;
- Realistic aims and objectives Statements should be realistic and in line with the resources of the Programme;

- Precision The choice of wording can make the difference between a Specific Objective having a clear, focused and realistic objective and versus an unrealistic aim;
- Clear wording, avoiding jargon e.g. the exact meaning of 'seizing new business opportunities based on ... place-based opportunities' may not be immediately clear to project partners; and
- Balance need to strike a good balance between providing enough information, but not overwhelming with too much.

Much of the structure and approach of the OP is dictated by the OP template, and it is recognised that working with the required word limits and components made presenting a coherent overall text difficult. However, the drafting team have worked through the draft OP texts and made significant improvements, many in line with the evaluation team's recommendations. The current OP text has been improved with a view to being accessible to relevant stakeholders, as well as meeting Commission requirements. In some areas, such as the description of actions supported under each Specific Objective, it is still felt that improvements in the overall structure and clarity of the text could be made, but it is acknowledged that time constraints did not make this possible. Points still worth considering include:

- Simplifying and clarifying the structure of the text, describing actions supported and results sought.
- Ensuring complete alignment between texts on the Priority Axes in the overall strategy, priority descriptions and indicators.
- Make sure that the concept of capacity building is explained the strategy and integrated clearly throughout, e.g. in the description of Priority Axes (draft OP p. 18-26) recommend mentioning the wording of the result indicator clearly in the text.
- Take care when mentioning 'will result in' in the text, e.g. see page 19, as this could give the impression it will be a Programme result.
- In the descriptions of the Specific Objectives' expected results, p. 34-38, explicitly use the wording of the result indicators in some way.

3.3.9 Horizontal Themes

The Programme rightly recognises that the horizontal principles are inherent in its overall vision, for example, by stating that "One main principle for the North Sea Region 2014-2020 is to contribute to the continuous and on-going improvement in the quality of life for current and future generations". Based around key development opportunities and challenges, the Programme draws the horizontal themes throughout by identifying relevant development challenges and highlighting how the Programmes Priority Axes and Specific Objectives address these issues.

Thus, the available text in the draft OP covers relevant points in terms of thematic links and the scope for projects, and project selection processes, to address the horizontal principles. In particular, the evaluation team notes that:

• In terms of sustainable development, one of the main principles for the North Sea Region 2014-2020 is to contribute to the continuous and on-going promotion of sustainability to secure quality of life for current and future generations.

²⁶ NSRP (2014) op cit , p. 116

- The programme makes a commitment to pursue sustainable development both by ensuring compliance with relevant national environmental legislation and by integrating sustainable approaches into the priorities of the Programme.
- The Programme sets out plans for a wide range of interventions in line with sustainable development objectives.
- Plans and requirements are set out for how projects should address the issue.
- In terms of equal opportunities issues of greatest relevance for the North Sea Region 2014-2020 were identified as part of the drafting process as (1) equal economic independence for women and men (2) equal pay for work of equal value, and (3) equality in decision-making.²⁷
- A strong Programme-level commitment is made to ensuring non-discrimination:
 - All organisations involved in the North Sea Region 2014-2020 will contribute to a positive environment for the active pursuit of equal opportunities and the prevention of deprivation, exclusion and discrimination in all forms in line with current national legislation.
 - North Sea Region 2014-2020 recognises the importance of applying social inclusion strategies wherever applicable.
 - Reference is made to efforts needed to ensure that the programme benefits a wide cross-section of the NSR population including the low-skilled, the young, the elderly, single and lone parents and people with disabilities.
 - Although not the focus on a Specific Objective, social inclusion is targeted indirectly in the Programme.
- The programme area covers some of the most developed countries in terms of promoting each of the horizontal themes. By noting this and setting the Programme in this context, the Programme's approach is further strengthened, e.g. in the case of equal opportunities and the proposal to adhere to national regulations.

Previous feedback from the ex ante evaluators noted that a more 'process' based account of how the horizontal themes are integrated in the Programme could be provided, e.g. noting developments in the programming process, aspects of programme content, relevant priorities and actions to ensure compliance throughout the lifetime of the Programme, including project requirements. The text could quite easily include additional references to practical Programme actions to support the horizontal principles, e.g. noting the involvement of relevant groups in consultation processes, integration of themes in the programme area analysis, and scope to consider the themes in evaluations and monitoring. It could even note general actions which can be promoted and encouraged across all projects (where relevant), such as green procurement, carbon-off setting, use of public and sustainable transport. In the text provided, equal opportunities, in particular, could be viewed a coming across simply as a project requirement, as opposed to something that is embedded in the Programme and considered throughout. To an extent programme-level commitment to equal opportunities is covered in the text on non-discrimination. However, on equal opportunities, the Programme's own commitment could also be stated and explained in the relevant section of the OP template. In response to these suggestions some inclusions have been made and it is also acknowledged that word limits in the OP template place constrains on how much detail can be included.

²⁷ European Commission: Strategy for Equality between women and men 2010-2015.

3.4 Overview

All the elements of a solid strategy are in place and a significant number of additions and improvements have been made to the OP text. The rationale, justification and purpose of the Programme are now more clearly conveyed than in comparison with earlier drafts. The considerable evidence base used to inform the strategy has been integrated and referred to in the text.

The Priority Axes are rooted in the analysis of the Programme area's strengths and weaknesses, draw on past experience, take into account partner feedback, and fit well with existing policy frameworks, most notably Europe 2020. The drafting team has taken into account a wide range of EU and domestic policy priorities and has considered how these align with the broad areas of intervention being considered by the NSRP.

There has been a strong consensus around many of the Priority Axes and Specific Objectives. Retaining a 'transport' strand to the Programme was open to some debate. Similarly, the inclusion of a Priority Axis linked to Thematic Objective 5, as opposed to Thematic Objective 4, was debated Based on feedback from consultations and evidence presented maintaining a transport objective for the Programme had considerable support. Similarly, close examination of the types of intervention to be supported and the final wording of the investment priorities helped to narrow the Programme's focus in terms of the number of Thematic Objectives.

The Priority Axes and Specific Objectives generally fit well within relevant Thematic Objectives and Investment Priorities. They can also work well together supporting complementary areas of activity. However, as the Programme develops care must be taken to avoid overlaps.

In some respects, the overall focus of the Programme remains comparatively broad, covering a number of thematic areas. However, the Programme has faced barriers to narrowing its focus further, with Member State and stakeholder feedback pushing for the inclusion of some themes and the inter linkages between key themes making exclusions challenging, particularly in relation to environmental interventions.

Nevertheless, within the Priority Axes efforts have been made to focus and target efforts. For example, within the Priority Axes, focus on, e.g. smart specialisation and green mobility highlight the fact that strategic decisions were taken to refine and narrow the spectrum of interventions and target key areas of strength with in the programme area.

The ex ante team have made substantial comments on the strategy's content and structure. Initial interventions aimed at supporting and encouraging the process of refining the Programme's focus. Subsequent inputs aimed at helping the Programme to convey the agreed priorities and objectives effectively in the OP text. Additional refinements include:

- Ensure the Programme focus on capacity building, which is set out in its indicator tables, is reflected throughout.
- Sharpen and clarify the texts describing the Specific Objectives.
- Selection criteria and target groups could be more simply and clearly set out, this does not have to be a comprehensive list, just an indicative list.
- The Programme could do greater justice to its analysis of the external policy environment and how this has informed the overall strategy.

On points of detail:

- Area analysis: it is still felt that within the main analysis at least some reference could be made to the situation in the programme area in terms of gender balance and social equalities/inequalities. It is recognised that these are covered in a separate part of the OP. Nevertheless, by including even a very brief reference in the strategy, the Programme gives a stronger reflection of the issue being considered from the outset and throughout the programming process. The constraints imposed by the OP template word limits are understood.
- As previously noted, drawing on lessons from past experience was another important element
 in the strategy development process. Some mention could be made of more strategic issues,
 such as areas of thematic strength in the past, new areas for the Programme etc. The
 European Commission are very interested in seeing Programmes progress and evolve, and
 there is scope for the OP text to make its point clearer on this issue.
- An additional point to note is in the discussion of administrative changes (p. 9), using the terms simplification and harmonisation would show the Programme's commitment to these concepts at an early stage. This is mentioned in some detail at a later stage in the OP, but could be reinforced in the strategy.

PART 3: EXTERNAL COHERENCE

Ex Ante Evaluation of the North Sea Region Programme		

4. EXTERNAL COHERENCE

4.1 Context

In line with draft Commission guidance, the ex ante evaluation must provide an assessment of the coherence of the NSRP with relevant external policies. This includes the degree to which the programme strategy is coherent with relevant regional and national instruments of the individual countries participating in the NSRP, as well as coherence with wider EU instruments.

Coherence is a broad term and implies the scope for positive links, awareness of potential overlaps, and the need for on-going coordination and even collaboration. During the programming process and, on an on-going basis through Programme implementation, 'coherence' is central to ensuring that the Programme works well within its policy environment, adds value to existing interventions, and is in a position to deliver results.

4.2 Establishing Programme Coherence

The NSRP programme covers a large geographic area and many individual countries. As a consequence, there are an enormous number of relevant EU, national, regional and territorial frameworks, strategies and policies to consider, see Figure 11.

Figure 11: External Coherence

EU

- Europe 2020
- CSF
- Partnership Agreements (Belgium Flanders, Denmark, Germany, Netherlands, Sweden, UK (England, Scotland)
- Other EU policies and interventions (e.g. Horizon 2020, TEN, National OPs...)

Domestic

- Regional Economic Development Policies and agendas (Belgium Flanders, Denmark, Germany, Netherlands, Norway, Sweden, UK - England, Scotland)
- · Domestic ETC agendas and priorities

Territorial Cooperation

- Neighbouring ETC programmes
- Macro Regional Strategies and Sea Basin Strategies
- Other forms of cooperation, e.g. North Sea Commission

As part of the programme development process, the place of the Programme within the wider policy environment was considered in detail. However, the number and range of policies and frameworks meant that this review had to be strategic and balanced. The review was achieved through a variety of means:

- · Programme Strategic Orientation Report;
- Ex ante 'Strategic Review';
- Ex ante report on coherence;
- Input from strategic partners, national and regional representatives; and
- Consultation feedback.

This information was used to inform a number of elements of the Programme, from overall strategic content to aspects of project implementation and the scope for coordination of policy instruments. A key point raised by the evaluation team was that the key elements of this work should be conveyed in the Programme text, as the following summary of ex ante feedback during the drafting process illustrates.

- OP text on 'policy coordination' should be more than a list of policies in related fields to the NSRP.
- The Programme can continue to assess: how to avoid overlap with other funding streams; the need for the NSRP to be distinct and recognisable to beneficiaries; and the need to move beyond general aims and identify Specific Objectives and results that inform the intervention logic. At the same time, the thematic continuity with Europe 2020 and links with other EU policies and programmes are clear. Therefore, opportunities for the Programme to complement the work of other EU programmes, coordinate activities and build collaborative and complementary results are key.
- A 'process' oriented approach could be used to develop this element of the Programme. Thematic links are highlighted and expectations for projects are considered. However, more could be done to emphasise and explain: how the Programme has (and hopefully will continue to) consider its role and place in the policy environment; and what processes and approaches have/will be used to manage synergies/links and relationships in the future.
- Coordination/coherence is something that should be considered at the Programme level as
 well as at the project level. Projects must fulfil the conditions set out, but the Programme itself
 also has to look at how it can engage with other policy frameworks and initiatives. In practice,
 this is something that the Programme already does and will continue to do in the future.
 Therefore, it would be useful to note this in either the strategy or coordination texts.
- As well as EU programmes and initiatives, national and regional frameworks and other ETC programmes should also be noted. It would be sufficient to refer to text in the Strategic Orientation Report and Strategic Review rather than including a comprehensive list of national/ regional policies.
- Specific reference should be made to the Strategy for the Baltic Sea Region (EUSBSR)
 Despite the fact that the EUSBSR covers only part if the Programme area, projects funded by the NSRP may be relevant to the strategy either on a thematic or geographic basis.
- The North Sea Region Programme has valuable experience and expertise in working alongside the North Sea Commission in a constructive and engaged way. This long-standing practical experience could be noted.

It is recognised that the number of policies, strategies and frameworks to be considered and the word limits in the OP template mean that information can only be presented in summarised form. However,

where necessary, references to the findings of existing reports can be used to supplement and support the points raised in the OP text.

4.3 Ex Ante Assessment

In line with draft Commission guidance, the ex ante evaluation must provide an assessment of the coherence of the NSRP with relevant external policies. This includes the degree to which the programme strategy is coherent with relevant regional and national instruments of the individual countries participating in the Programme, as well as coherence with wider EU instruments.

As the character and content of the new Programme has developed, the drafting team had to consider the Programme's links to other policies and Programmes on an on-going basis. For a transnational territorial cooperation programme, there is an enormous number of relevant EU, national, regional and territorial frameworks, strategies and policies to consider. It is also important to note that many of the strategies, agreements and programmes that the Programme had to take into account are themselves in the process of being drafted. While every effort was made to base analyses on the most up to date information, it is acknowledged that changes are ongoing in some programmes. Thus, the following analysis is based on information available at the time of drafting.

Key questions for the ex ante include:

- Where the Programme 'fits' with other relevant policies and interventions, specifically
 - EU strategies, programmes and policies,
 - Domestic policies, and
 - Territorial cooperation arrangements.
- Review the Programme's analysis of and its contribution to 'other' strategies and policies, and whether the Programme takes into account the influence of other policies and programmes on the expected results of the Programme and how the programme justifies its role?²⁸
- How coherence and coordination will be managed in a practical sense, e.g. by setting out proposals for how synergies and complementarities will be exploited to ensure effectiveness and describing coordination mechanisms for the relevant funding sources.

4.3.1 Europe 2020

As previously mentioned, the NSRP has taken Europe 2020 as its anchor point, which means that links to this key Strategy are clearly established. Through focussed, strategic interventions the NSRP can make its own distinct contribution to the 2020 goals, through:

- areas of activity where the NSRP is in alignment with, and can deliver results towards, Europe 2020 goals;
- areas of activity where, due to their strategic importance to Europe 2020, coordination with other policies, programmes, and priorities could be of particular relevance.

²⁸ CEC (2013d) Regulation (EU) No 1299/2013 of the European Parliament and of the Council of 17 December 2013 on specific provisions for the support from the European Regional Development Fund to the European territorial cooperation goal

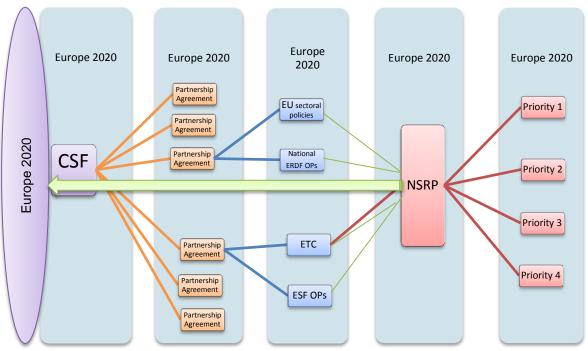
Examples are set out in Table 5.

Table 5: Engaging with Europe 2020

	Europe 2020 priorities	Indicative NSRP 2014-2020 contributions and areas for coordination
Smart growth	 investment levels to reach 3% of EU's GDP 75% employment rate for women and men aged 20-64 better educational attainment 	 Transnational approaches to develop collaborative links between R&D institutions public and private sector Transnational cooperation to support 'smart specialisation strategies Development and application of new technologies and approaches Support the continuing development of regional innovation in the Programme area
Sustainable growth	 more competitive low-carbon economy protecting the environment New green technologies Efficient Smart electricity grids harnessing EU-scale networks improving the business environment (SMEs) helping consumers make well-informed choices 	 Solutions to address challenges from improving the sustainable use natural resources Developing green transport solutions Adoption of energy-saving technologies and methods Promotion of alternative energy measures Application of green-technologies Protection and management of the marine environment Promote the use of more sustainable transport solutions
Inclusive growth	 more and better jobs investment in skills & training modernising labour markets and welfare systems ensuring the benefits of growth reach all parts of the EU 	 Improving accessibility through multimodal transport solutions Addressing the needs of areas in decline Addressing the impacts of demographic change through support for social innovation projects

These thematic links and efforts to focus on key areas of Programme strength suggest that NSRP projects can make a positive contribution towards larger-scale Europe 2020 goals. In addition, working closely within the Europe 2020 framework and identifying key areas of coherence with the Strategy also means that the NSRP can establish a solid foundation for coordination and cooperation with other related EU agreements, policies and programmes, which are also rooted in the 2020 Strategy, Figure 12.

Figure 12: NSRP 2020 links



(i) Common Strategic Framework

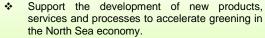
The Common Strategic framework (CSF) is a broad document that includes an emphasis on:

- the importance of addressing Europe 2020 objectives and highlights opportunities for complementarity and coordination across EU Funds;
- ways in which programmes can address eleven key investment priorities; and
- priority areas for transnational programmes.

The demands for increased concentration of funds mean that the NSRP cannot address all priority areas set out in the CSF. As has been noted, content group discussions, the Strategic Review and the Strategic Orientation Report have carefully analysed the relevance of each of the 11 thematic priorities set out in the CSF and also the priority areas set out for ETC programmes, see Figure 13. In doing so the NSRP is able to distinguish the Programme from actions to be funded through other EU Funds and programmes, making the distinct role of the Programme in the region clearer, facilitating coordination and avoiding overlap. As Figure 13 illustrates, the Priority Axes of the NSRP have a strong thematic correspondence to areas of activity identified for the ETC programmes.

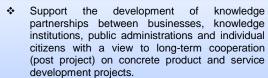
Figure 13: NSRP links to European Territorial Cooperation Priority areas

Areas that share major geographical features (lakes, rivers, sea basins or mountain ranges) should support: the joint management and promotion of their natural resources, protect biodiversity and ecosystem services, develop integrated cross border natural risk management, address pollution of these areas and implement joint climate change adaptation and risk prevention and management measures, in particular in relation to flood



- Limit future environmental damage and restore already damaged sites
- Climate change resilience

To achieve critical mass, cooperation in the field of research and innovation and ICT can be particularly effective by supporting: innovative clusters, centres of competence and business incubators and smart connections between the business sector and the research and higher education centres. The development of joint smart specialisation approaches, regional partner facilities and platforms for co-investment should also be promoted. Supporting partnerships among educational institutions and exchanges of students and teachers also contribute to achieving critical mass.



Support the continuing development of regional innovation support capacity that will allow all regions to effectively and independently pursue objectives after the end of the funding period

Economies of scale that can be achieved are relevant to investment related to: the shared use of common public services, particularly in the field of waste and water treatment, health infrastructure, education facilities and equipment, accessibility, social infrastructure, ICT, research and innovation infrastructure, green infrastructure, disaster management systems and emergency services. Promoting soft cooperation in these areas (health insurance, developing joint educational and training schemes, harmonising schedules and ticketing, or introducing new public transport connections, risk assessment procedures) can further enhance savings and quality of life.



- Development of multi-modal transport connections in North Sea region
- Support green transport solutions

In the area of cross-border network infrastructure, transnational cooperation programmes could focus on: providing support for the coherent planning of transport infrastructure (including TEN-T) and the development of environmentally friendly and interoperable transport modes in larger geographical areas. Cross-border cooperation, in particular among less developed regions, could focus on missing cross-border links that act as bottlenecks to transport flows. The development of electricity networks to enable a larger take-up of electricity produced with renewable sources could be enhanced by both transnational and cross-border cooperation in investing in specific sections of infrastructure networks.



Ensure widespread take-up of alternative fuels and fuel-saving technologies and methods

Move significant volumes of freight and passengers to more efficient modes of transport and off the roads

(ii) Partnership Agreements and national cohesion policy priorities and programmes

The NSRP has to operate alongside numerous other Cohesion policy programmes, all developed in accordance with the same overall frameworks and guidelines. The NSRP area is made up of regions in six EU Member States, as well as Norway. Within the area numerous national, regional and ETC programmes are being drafted.

Given the number of countries and regions involved and the fact that the OP drafts are not yet finalised, it was not practical to identify specific links and possible areas for coordinated action. In addition, delays in the negotiations of the Multi Annual Financial Framework (MFF) and the Cohesion policy regulations had a knock on effect on the Partnership Agreements.

For much of the drafting period the main formal source of information was position papers from the European Commission, which remain an important strategic reference document for the final Partnership Agreement. These outline what the Commission considers to be the main challenges for Member States in the next programme period, see Table 6. Although the challenges identified are diverse, recurring themes are: support for research and innovation, adaptation to climate change and sustainable development, which all align with NSRF priorities. Fewer direct references are made to transport needs. However these are commonly linked to economic competitiveness and moves to promote sustainability. Thus, early in the drafting process, account was taken of the priorities being discussed as part of national Partnership Agreements and Programme planning processes, in doing so:

- · areas of potential common interest could be identified,
- alignment with national positions could be noted, and
- areas of specific interest for territorial cooperation activities highlighted.

In addition, national representatives on the NSRP content group and PPSG were able to note areas of coherence/divergence. Such an understanding of the position of the NSRP relative to national cohesion policy priorities was another step in ensuring a level of coherence and coordination between the Programme and the strategic policy context.

Table 6: Development challenges highlighted in draft position papers

BE: (i) Long-term loss of competitiveness due to cost developments, low productivity growth and knowledge intensity (ii) low employment levels and disparities in educational attainment and social inclusion (iii) lack of progress toward reduction targets for GHG from non-ETS sources.

DE: (i) Regional competitiveness and demographic change (ii) enhance labour market potential, social inclusion and raise educational achievement (iii) the transformation of the energy system and the sustainable use of natural resources

DK: (i) Enhance productivity and competitiveness through innovation and business development (ii) enhance labour supply through inclusion, skills adaption and education measures (iii) enhance mitigation of and adaptation to climate change.

NL: (i) Insufficient R&I intensity and uptake by businesses (ii) unsatisfactory labour market participation for certain groups (women, disabled people, migrants, lone parents, long-term unemployed and older workers) (iii) need for more efficient and sustainable use of resources, in particular of renewables.

SE: (i) Insufficient commercial return from innovation and research and a weak development of fast-growing innovative enterprises (ii) Low labour market participation of youth and vulnerable groups (iii) need to improve the natural resource management and cost-effectiveness of measures related to climate change

UK: (i) Decreasing labour market opportunities and increasing risk of social exclusion (ii) stagnant investment in R&I and low availability of finance to the private sector (especially SMEs) (iii) Inefficient use of resources



NSRP alignment through:

- Focus on competitiveness and innovation in key sectors
- Focus on innovation and knowledge economy
- o Low carbon, energy saving, carbon reduction technologies

Source: Adapted from Mendez, C. (2013) European perspectives on the 2014 Partnership Agreements & Programmes: a comparative analysis of the Commissions position papers.

As has been noted, EU Regulations for ETC programmes stipulate that the programmes are required to provide a description of how coordination with other European Structural Investment (ESI) funds is ensured.²⁹ In large-part this will rely on administrative processes and procedures to ensure coordination. However, coordination needs to be accompanied by an understanding of key themes and areas where coordination is particularly relevant. Table 7 highlights some broad areas where thematic complementarities with specific types of programmes can be identified.

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²⁹ EC (2012) Proposal for a Regulation of the European Parliament and of the Council on specific provisions for the support from the ERDF to ETC goal Article 7(5)(a) ETC regulations (14.03.2012)

Table 7: Links to European Structural Investment Funds

ESI fund	North Sea Region Programme Links		
Loriuna	Links to all NSRP themes		
ERDF	Up scaling of projects in both directions		
	Potential links to the NSRP include:		
ESF	 Low carbon and climate resilient economy through reform of education and training systems, adaptation of skills and qualifications, up-skilling of the labour force, and the creation of new jobs; 		
	social innovation projects		
EAFRD	Potential links to the NSRP might involve: • fostering transnational knowledge in rural communities through innovation networks; • promoting and supporting economic diversification through transnational partnerships;		
	 finding solutions to societal changes (inclusion through social innovation) providing sustainable accessibility solutions for rural communities 		
Potential links to NSRP might involve ³⁰ :			
	promote climate action in relation to the energy efficiency of fishing vessels;		
EMFF	energy audits and schemes;		
	 insurance of aquaculture stock with regard to extreme weather events; and the implementation of local development strategies including operations to mitigate climate change. 		
Cohesion Fund	N/A		

Key points set out in the relation to ETC in the draft position papers are summarised in Table 8.

³⁰ Information draws from preparatory work carried out by the NSRP drafting team

Table 8: Potential focus for Territorial Cooperation in Partnership Agreements³¹

Country	Key ETC points from position papers	Key North Sea Region Programme links
Belgium	 Should promote business R&I investment, product and service development, technology transfer, social innovation and public services applications, networking, clusters, open innovation through smart specialisation and remove barriers to labour mobility Generate sustainable growth and new jobs in maritime sector 	
Denmark	 A selective approach that concentrates on a very limited number of priorities Concentrate on flagship projects Thematic focus: Research and innovation, SME competiveness; Energy, environment and climate change; connectivity and accessibility; employment education and training; Maritime development Continue to facilitate the implementation of the EUSBSR. 	focus on research and innovation and technological development;
Germany	 Use of EGTC where appropriate Objectives of TC programmes should take into account priorities of the macro-regional strategies Areas of relevance for cross-border and transnational actions should be linked with the funding priorities proposed for the country-specific programmes 	support for the competitiveness of SMEs; scope for networking and cluster activities;
Netherlands	 ETC programmes should be based on four principles: a more strategic approach; draw lessons from previous period; better linkages between ETC actions and national policies; and a stronger sense of partnerships. Strategic themes include: research, technological development and innovation, environmental and resource friendly economy, maritime management (flood protection and coastal and marine pollution), labour market integration, cross-border health care provisions Mobilise co-investments and unleash the smart specialisation potential of cooperative cluster nodes and leverage maritime economic potential EGTC should be considered 	networking, connectivity and knowledge exchange; education and training; management of marine environments;
Sweden	 ETC should focus on: research and innovation, SME competitiveness; Energy, environment and climate change mitigation and adaptation; Connectivity and accessibility; Transnational exchanges in the employment and education and training area; Marine knowledge, maritime spatial planning, integrated coastal zone management, integrated maritime surveillance, protection from major emergencies at sea and on land and sustainable growth and jobs in the maritime economy. ETC should take into account the priorities of the EUSBSR In Sweden's northern, sparsely populated and remote areas the growing regional cooperation in the northern part of the EU and neighbouring countries within the Arctic Barents region offers opportunities to address the challenges jointly for maximum impact. 	environmental protection; and addressing climate change, including energy efficiency and renewables.
UK	 ETC should focus on: fostering innovation, eco-innovation projects, including comprehensive observation of the ocean environment, renewable energy, energy efficiency and environmental protection, and knowledge transfer and sharing of best practice between business, research and education. ETC should mobilise co-investment to realise smart specialisation The transnational dimension of the Atlantic Strategy can bring new dynamism A potential PEACE programme should address social inclusion, youth work, education and capacity building for communities in Northern Ireland. 	mag in Mamhar States for the paried 2014 2020

Source: Commission position paper on the development of Partnership Agreement and programmes in Member States for the period 2014-2020

³¹ The Commission's position papers discussed ETC objectives across the three strands (INTERREG A, B and C). Not all topics are necessarily applicable to transnational cooperation.

4.3.2 EU sectoral programmes and policies

There are numerous additional European policies and instruments which were considered by the NSRP. As part of the drafting process, the Strategic Orientation Report and Strategic Review have provided overviews of key strategic frameworks, including Innovation Union, Digital Agenda and Agenda for new skills and jobs. Numerous policy interventions are associated with these, e.g. see Table 9 and Annex 2.

Table 9: Selected EU sectorally oriented policies.

Horizon 2020	Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness. Running from 2014 to 2020 with an €80 billion budget, the EU's new programme for research and innovation is part of the drive to create new growth and jobs in Europe.	- Close links with 'Thinking Growth' objective - potential for valorisation of Horizon 2020 research - High number of potential partners with Horizon 2020/ Framework experience in the Programme area
Trans European Networks	TEN-T framework aims to integrate land, sea and air transport infrastructure networks across the Union. In this context, the North Sea is recognised as a project of common interest under the Motorways of Seas priority.	- The NSRP's focus on transport logistics is directly linked to TEN-T network.
Sustainable Urban Development	The proposals for Cohesion policy 2014-2020 aim to foster integrated urban policies to enhance sustainable urban development in order to strengthen the role of cities. Measures concerning physical urban renewal must be combined with measures promoting education, economic development, social inclusion and environmental protection. In addition, the development of strong partnerships between local citizens, civil society, the local economy and the various levels of government is a prerequisite. 32	 The North Sea Region is diverse, but contains some major urban areas. New products and services delivered scope to address improved urban rural links, transport in urbanised areas, environmental improvements, etc. As innovation hubs, city regions expected to play a key role. Potential involvement of city authorities as project partners.
LIFE Programme	The EU's LIFE programme is an important instrument for the environment. The general objective of LIFE is to contribute to the implementation, updating and development of EU environmental policy and legislation by co-financing pilot or demonstration projects with European added value.	- emphasis on mutual learning and minimum indicative of 15 % to be allocated to transnational activity - projects in 'eco-innovation' and also 'green mobility' can be expected
Educational programmes	The EU's Lifelong Learning and Erasmus programmes provide education and training opportunities. ³³ It fosters cooperation initiatives in Europe at all levels of education and training (schools, higher education, vocational education and training, and adult education). ³⁴	- can add value in its support to transnational cooperation, giving access to a wider range of best practice and innovative ideas. ³⁵ - In the context of transnational cooperation the policy aims to facilitate cross border educational exchanges as well as better cooperation on education policy

³² CEC (2014) Integrated Sustainable Urban Development

http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/urban_en.pdf >

³³ CEC (2013d) op cit ETC regulation)

³⁴ CEC : Proposal for a Regulation of the European Parliament and of the Council establishing "ERASMUS FOR ALL", COM (2011) (788) Final, pp. 14-17

Connecting Europe Facility	Connecting Europe Facility (CEF) is a €50 billion initiative that will support the development of high performing, sustainable and efficiently interconnected trans-European networks in the fields of transport, energy and digital services.	supports cross border public services online links to the NSRP's transport priority by targeting missing cross-border physical interconnections of high EU added value
COSME	Aims at improving the business environment and the competitiveness of European enterprises by: providing access to finance for SMEs; create an environment favourable to business creation and growth; encourage entrepreneurial culture in Europe; increase the sustainable competitiveness of EU companies; and helping small businesses operate outside their home countries and improving their access to markets	The NSRP can contribute in terms of aim to involve the private sector, including SMEs in the next programme period The NSRP innovation priority can particularly contribute to the aim of helping small businesses operate outside their home countries and improving their market access and encourage trans-national networks, exchange good practices and identify scope for expanding business activities

Table 9 is not exhaustive, but provides an indication of the type of EU policies and instruments that are likely to be in place for the 2014-2020 period in key thematic areas of activity for the NSRP. Further details on these policies are included in Annex 2.

As well as noting alignment with these policies and provisions, the Programme is also careful to highlight areas where there it is distinct, by noting the:

- non-territorial, non-place based approach of Horizon 2020,
- different types of financial instruments provided by COSME,
- wider approach taken to target groups and target areas in comparison to EAFRD,
- strong policy focus of LIFE +, and
- focus on core networks of TEN-T.

The Programme also considered the wide range of financial products and instruments offered by European Investment Bank (EIB). However, it is not clear exactly how all the facilities would apply in a transnational context. Also, many target large-scale projects and are unlikely to be of direct value to the NSRP. However, Programme partners can potentially upscale projects through EIB facilities.

As has already been highlighted, greater coordination between funds is something the European Commission has been actively seeking to support. Alongside the broad objective of greater coordination and linkages between funds, it also worth noting that a number of instruments have been introduced to try support this process, see Annex 3. The Programme considered these new instruments and came to the conclusion that, at this stage, they either remain challenging for transnational ETC, or are not immediately relevant to the NSRP. However, the overall objectives of increased coordination, cooperation and awareness of the external policy environment are key issues for the future Programme.

³⁶ CEC (2012) Connecting Europe Facility: Investing in Europe's growth. Available at: European Commission: https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/cef.pdf

³⁷ CEC (2013) COSME Programme for the Competitiveness of enterprises and SMES (COSME) 2014 - 2020 http://ec.europa.eu/cip/files/cosme/cosme_leaflet_recto_verso_a5_revii_en.pdf

4.3.3 Territorial Cooperation Programmes and Frameworks

Throughout the programming process, the NSRP has, as far as possible, aimed to consider its position relative to other forms of territorial cooperation around the Programme area.³⁸ Developments over the 2007-13 Programming period have seen the interconnections, interrelations and cooperation between countries and regions intensify and expand. These developments add an additional dimension to the policy landscape and mean the NSRP had to consider its role, position and contribution relative other forms of cooperation. Throughout the programming process, the NSRP has as far as possible monitored developments in other INTERREG programmes as well as taken into account the development of macro regional and sea basin strategies.³⁹

(i) INTERREG

Within the NSRP area in the 2007-13 period, there were a total of twelve cross-border programmes that overlap with one or more NSRP partner regions. For example, the OP 'Öresund - Kattegat - Skagerrak' covers parts of Sweden, Denmark and Norway (all NSRP partner states) and is located relatively centrally within the NSRP area. In comparison, the OP 'France (Channel) – England' shares common ground with the NSRP area only in some parts of the South and East of England. There were also four INTERREG IVB programmes with have geographic overlaps with the NSRP.

At the time of writing, many of the INTERREG V programmes were still being drafted or had not yet been approved. However, it is possible to identify tentative links particularly for the INTEREG VB programmes, see Table 10. The overall aim of the INTERREG VA programmes is to tackle common challenges identified jointly in the border regions. In doing so, these programmes will pursue some similar goals to those of the NSRP, as has been the case in the past, see Annex 4. ⁴⁰ Just as the NSRP has evolved and changed in the 2014-2020 period, the INTERREG V programmes will also have developed. However, the preliminary reviews undertaken provided an early indication of parallels to inform early drafting processes, see Annex 4 ⁴¹

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³⁸ McMaster et. al (2013) NSRP Coherence and Coordination, report prepared as part of the ex ante evaluation of the NSRP, EPRC, Univseristy of Stratehclyde, Glasgow

³⁹ McMaster et. al (2013) op cit.

⁴⁰ Each cross-border programme covers a number of specified regions directly, but they also allow participation from specified neighbouring regions. For example, the OP 'Belgium – France' covers 15 NUTS3 border areas directly, but enables the participation of another 17 NUTS3 regions in addition. The twelve programmes here are detailed on the basis of directly covered regions overlapping the NSRP area only.

⁴¹ Each cross-border programme covers a number of specified regions directly, but they also allow participation from specified neighbouring regions. For example, the OP 'Belgium – France' covers 15 NUTS3 border areas directly, but enables the participation of another 17 NUTS3 regions in addition. The twelve programmes here are detailed on the basis of directly covered regions overlapping the NSRP area only.

Table 10: Links and overlaps with the NSRP

Programme	Priorities for 2007-2013 and 2014-20 ⁴²	Links with NSRP
Northern Periphery and Arctic	2014-20 priorities are: Innovation: Increased Innovation and transfer of R&D increased innovation in public service provision Entrepreneurship: Improved support systems for start-ups and existing SMEs; greater market reach Renewables and Energy Efficiency: Increased use of energy efficiency and renewable energy solutions Protect, promote and develop cultural and natural heritage – increased capacity for sustainable environmental management	A range of links are emerging, most notably in relation to innovation, low carbon economies and management and protection of natural resources. Of particular note is the: • emphasis on innovation in public service provision in the Northern Periphery and Arctic Programme • inclusion of transport in the Baltic Sea Programme • management of maritime and coastal areas in the Atlantic Area.
North West Europe	2014-20 priorities are: ⁴³ Research and innovation; Promotion of a low carbon economy; Environment and energy efficiency.	While broad thematic parallels are apparent, within each of these very broad headings each of the Programmes will be focussing on a narrower range of objectives. Thus, the Programmes will also be working in their own way to address development needs and opportunities in their respective regions.
Baltic Sea	2014-20 priorities are: Innovation; Natural resources; Transport Institutional capacity for macro-regional cooperation	
Atlantic Area	 2014-20 priorities are:⁴⁴ Innovation and competitiveness; Resource efficiency; Management of maritime and coastal areas; Natural and cultural heritage (i.e. enhancing the attractiveness thereof) 	

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 $^{^{42}}$ As programming for the 2014-20 period is ongoing, these are detailed on an indicative basis only, where information is available, and may be subject to change.

⁴³ Based on the agreed thematic objectives as of April 2014. These are subject to change. NWE (2014) NWE 2014-2020 http://www.nweurope.eu/index.php?act=page&page_on=about&id=1576

⁴⁴ Atlantic Area Programme (2014) DRAFT Atlantic Area Transnational Cooperation Programme 2014-2020; Socio-economic and SWOT analysis and intervention logic; 18 March 2014

While there are complementarities between programmes, the NSRP has to carve out its own distinctive niche in order to be recognisable and avoid duplication of effort. The ex ante team noted several options available relating to themes or implementation approaches:

- strong coastal and maritime dimension;
- products and services orientation;
- strong private sector orientation; and
- piloting new innovative concepts in key sectors for the region.

To an extent these elements have been built into Programme drafts, which help to ensure that the Programme stands out and is clearly recognisable by beneficiaries in the region. More generally, the Programme can draw on positive experience from the current period and continue aspects of management and implementation where the Programme is already working alongside other INTERREG programmes. Potential options to consider in relation to the implementation of the Programme are:

- · establishing joint working groups to exchange project details with other programmes; and
- integrate animation/ contact point facilities at the national/regional level.
 - (ii) Macro-regional Strategies, Sea Basin Strategies and EGTC

During the 2007-13 programme period, a number of new frameworks for territorial cooperation were established as a result of an increasing drive for further harmonisation of legal frameworks to facilitate territorial cooperation.

• European Grouping for Territorial Co-operation

While there are EGTC arrangements within the NSRP area, these are extremely limited in number and confined to a small part of the Programme area, see Figure 14. However, as more ETC arrangements are established in the medium-longer terms, the Programme can consider effective ways to engage, e.g. through project activities.

EGTCs in Europe
February 2012.

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Figure 14: EGTC in the EU

Source: Interact, http://www.interact-eu.net/egtc/egtc/30/16

Marco-regional Strategies and Sea Basin Strategies⁴⁵

The EU regulations state that the Common Strategic Framework and the Partnership Agreement shall, where appropriate, take account of macro-regional strategies and sea basin strategies. ⁴⁶ Throughout the Programme drafting period the NSRP has monitored the implementation and development of macro regional strategies and sea basin strategies in its vicinity. Table 11 details the one established macro-regional strategy (the Baltic Sea Strategy) and emerging strategies that are most relevant to the NSRP.

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⁴⁵ This section draws on Mirwaldt, K. and McMaster I (2010) Marco-regions, Concepts, Practice and Prospects, EPRC, University of Strathclyde.

 $^{^{46}}$ Amended Proposal for regulation (2011/0276 (COD) f the European Parliament and of the Council of 11 September 2012, Article 11f and Article 14a(v)

Table 11: Overview macro regional and sea-basin strategies

Regional Strategies		
European Union Strategy for the Baltic	The EUSBSR is the first macro-regional strategy covering several community policy areas. The strategy addresses four challenges: To enable a sustainable environment To enhance the region's prosperity To increase accessibility and attractiveness To ensure safety and security in the region	
Proposed North Sea Region 2020 Strategy	The NSC's North Sea Region 2020 strategy includes five priorities • managing maritime space • increasing accessibility and clean transport; • tackling climate change; • attractive and sustainable communities; and • promoting innovation and excellence (a horizontal priority).	
EU Aratic Policy ⁴⁹	 The north of NSRP area stretches into the Arctic. Although no Arctic strategy has been formulated, efforts are being made to develop an EU policy for Arctic. The Commission and High Representative are proposing to focus further development of the EU's policy towards the Arctic on three key areas: Supporting research and channel knowledge to address the challenges of environmental and climate changes in the Arctic; Acting with responsibility to contribute to ensuring economic development in the Arctic is based on sustainable use of resources and environmental expertise; Intensifying its constructive engagement and dialogue with Arctic States, indigenous peoples and other partners. 	
Maritime Strategy for the Atlantic Ocean	The NSRP is also adjacent and overlaps with the Atlantic Ocean Area maritime Strategy. The high-level priorities for this strategy are: Implementing the ecosystem approach Reducing Europe's carbon footprint by accessing the regions renewable potentials Sustainable exploitation of the Atlantic Seafloor's natural resources Responding to threats and emergencies Socially inclusive growth	

Baltic Sea: Although the EUSBSR is not directly covering the NSRP area, the NSRP does border the Baltic Sea Region and several of the NSRP partner States (Denmark, Norway, Sweden and Germany) regard it as a priority. Many of the issues in the Baltic region cannot be seen in isolation and either directly or indirectly impact on the North Sea region. Furthermore, themes such as transport, innovation and sustainability are of common interest. Experiences from 2007-13 NSRP provides a model for monitoring the contribution of NSRP projects to the EUSBSR.

North Sea: No macro-regional strategy has been adopted for the North Sea Region. However, the possibility of developing such a strategy, or at least supporting even greater coordination and cooperation within the North Sea region has been the focus of attention, particularly for the North Sea Commission. In 2011, the North Sea Commission produced a strategy document identifying the key challenges and opportunities in the North Sea region,⁵¹ which are translated into five thematic priority areas on which the NSR 2020 strategy should focus:

⁴⁷ CEC (2009) European Union Strategy for the Baltic Sea Region COM (2009) 248 final

⁴⁸ NSC (2011) North Sea Region 2020;

⁴⁹ CEC (2012) Developing a European Union Policy Towards the Arctic Region: Progress since 2008 and next steps

⁵⁰ CEC (2011) 2011/782 final, Developing a Maritime Strategy for the Atlantic Ocean Area.

⁵¹ NSC (2011) op cit

- Managing the maritime space in the N. Sea;
- Increasing accessibility and clean transport;
- Tackling climate change;
- Attractive sustainable communities; and
- Promoting innovation, excellence and sustainability.

As no official strategy has been adopted in for the North Sea region, the NSRP does not have to be tied to the objectives and priorities set out in the NSR 2020 document. However, the aims set out do offer a useful indication of some key shared/common development concerns for the North Sea region and areas where there is an interest in pursuing cooperative responses are plentiful (e.g. accessibility and clean transport, promoting innovation, excellence and sustainability and attractive sustainable communities. Also, continuing to productively engage with the North Sea Strategy and developments in the region will be useful for the Programme in the future. This is something the Programme is in a very strong position to do with its long-standing links to the NSC and joint North Sea Conferences.

Atlantic Ocean Area: In 2011 the European Commission published its proposals a Strategy for the Atlantic Ocean Area. Whilst the proposed approach largely focuses on helping communities living and working on the Atlantic coast, the strategy cannot be seen in isolation. Several NSRP partner states take an interest in the future strategy (United Kingdom and Norway). Furthermore, the boundaries between Atlantic Area and the North Sea region are adjacent. Moreover, many of the themes of the Atlantic strategy are complimentary. This is particularly the case in relation to measures for reducing carbon emissions and environmental sustainability.

Arctic: The Arctic is becoming an area of increasingly strategic importance.⁵² Developments in the Arctic are the subject of intense domestic and international debate on issues including climate change, resource management and accessibility and the roles of stakeholders and vested interests in the region. Several NSRP partner states have an interest in Arctic developments. Norway, Sweden and Denmark (through Greenland) are members of the Arctic Council and the Netherlands, Germany and UK are permanent observers. Moreover, the challenges that are facing the Arctic have a direct impact on the North Sea Region in terms of the effects of climate change and environmental stewardship. Additionally, the changes in the Arctic offer opportunities in terms of the opening up of new sea routes and the extraction of minerals, which could have a profound effect on North Sea region communities. The establishment of new transportation corridors to integrate the North Sea and Barents Sea Basins is particularly important for the northern parts of the programme area due to the increased petroleum activity in the Arctic. Throughout the Programming process developments have been monitored by the Programme and ex-ante evaluators.⁵³

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⁵² EC and High representative of the European Union for Foreign Affairs and Security Policy (2012) Joint communication to the European Parliament and the Council, Developing a European Union Policy towards the Arctic Region: progress since 2008 and next steps.

⁵³ NSRP (2013) Strategic Orientation Report: Working Paper for the next programme period, final draft, 4 February 2013, p. 52 and McMaster I etc al (2013), University of Strathclyde, Glasgow, Interim Report: Ex ante evaluation of the North Sea Region Programme, August 2013, p. 54

4.3.4 Domestic Policy

The domestic policy environment in each of the participating counties has also been a key consideration for the 2014-20 NSRP. The overall strategic links between national policy priorities and EU Cohesion policy frameworks are dealt with in national Partnership Agreements. However, in order to ensure coherence and understand how the NSRP can effectively coordinate with national policy, the Strategic Review and Strategic Orientation Reports also analysed how the Programme fits with the domestic policy context and, in particular, how it fits with existing regional economic development priorities, policies and strategies.

(i) Domestic policy conditions⁵⁴

During the programming phase the NSRP had to take into account the changing policy context and in particular the economic and financial crisis, which is influencing current economic development policies across the Programme area. In the NSRP area, the economic crisis has had a variable macro-economic impact, ranging from relatively stable financial sectors in Norway and Sweden to the national economies of the UK, Belgium and the Netherlands, which were all significantly affected by the crisis and have demonstrated only limited levels of economic recovery. Related to this, in some NSRP partner countries, public finances are relatively sound and budgets for regional economic policy have even increased in recent years (e.g. Norway and Sweden). In others, austerity measures have been introduced to restore balance in the government finances and reduce debt ratios, which has impacted on regional policy budgets and co-financing, e.g. in the UK.

In many respects, economic development concerns and their impact on regional economies heighten the relevance of programmes like the 2007-13 NSRP, since such programmes target economic growth and support new development. However, the economic crisis also raises on-going challenges, such as meeting financial commitments and mobilising project partners. National government concerns over value for money and effectively managing limited financial resources are also leading to an increasing interest in coordinating external sources of funding (such as EU Cohesion policy finding) and maximising their impact.

(ii) Domestic policy links

Beyond the impacts of economic shifts, there are also core regional development themes that remain central to national regional economic development policies in the NSRP countries. Table 12 provides an overview of the key regional development priorities in each partner country. It is not feasible and practical for the NSRP to demonstrate its linkages to these policies individually. However, a review of national strategies⁵⁵ highlights several important themes in national regional developments policies. These include:

5

⁵⁴ This section draws on Davies S. *et al* (2009) *Regional Dimensions of the Financial and Economic Crisis*, EoRPA Paper 09/1, prepared for the 30th meeting of the EoRPA Regional Policy Research Consortium at Ross Priory, Loch Lomondside on 4-6 October 2009, EPRC, University of Strathclyde; Yuill D *et al* (2009) *Regional Policy under Crisis Conditions: Recent Regional Policy Developments in the EU and Norway*, EoRPA Paper 09/2, prepared for the 30th meeting of the EoRPA Regional Policy Research Consortium at Ross Priory, Loch Lomondside on 4-6 October 2009, EPRC, University of Strathclyde; Mendez, C. and Kah, S. (2009) Programme Implementation in Times of Economic Crisis: Review of Programme Implementation Winter 2008-Spring 2009, *IQ-Net Review Paper No. 24(1)*, EPRC, University of Strathclyde.

⁵⁵ McMaster et al (2013) Strategic Review of the North Sea Region Programme, EPRC: Strathclyde University

- Business, especially SMEs, and R&D/innovation support;
- Diversification and developing key sectors;
- Social cohesion, quality of life and wellbeing;
- · Accessibility and the needs of both core and peripheral areas; and
- Environmental protection, carbon reduction and renewable energy as means of supporting sustainable economic growth.

Each of these themes resonates with areas of activity in the NSRP. The NSRP's 'thinking growth' priority addresses issues around business and R&D/ innovation support. Through the Programme's support for development of regional innovation it can promote diversification of regional specific sectors. The NSRP makes a contribution to social cohesion, quality of life and wellbeing issues by supporting the development of demonstration projects and prototypes that tackle major societal change. Accessibility as well as carbon reductions and renewable energies are addressed through its green mobility and clean economy priority. Finally, through the national consultation processes and the continuous dialogue with the partner states, the priorities of domestic regional development strategies have been considered on an on-going basis.

Table 12: National regional development priorities in NSRP countries

Countries	Priorities
Norway ⁵⁶	Norway's continues to provide strong support for a pro-active rural and regional development policy that aims to ensure opportunities for all. Some key points in the policy are: • Attractive local communities • Infrastructure, Transport and communications technology • Focus on regional inward immigration
Denmark ⁵⁷	The Danish Government's Growth policy is based on two core elements, strengthening of general growth conditions and identifying growth conditions in areas where Danish industry has particular strength and potential. The Danish government has set up a number of committees (growth teams) - which have been making recommendations to the growth strategy in a number of areas: • Health and Welfare Solutions • Energy and Climate • Food Economy • Tourism and Experience Economy • ICT and Digital growth • The maritime area • Water, Bio-economy and Environment

⁵⁶ St.meld.nr. (2012-2013), Ta Heile Noreg I bruk, Distrikts- og regional Politikken http://www.regjeringen.no/pages/38245831/PDFS/STM201220130013000DDDPDFS.pdf

Regeringen (2013) Danmark i arbejde: Vækstplan for energi og klima, available on: http://www.evm.dk/publikationer/2013/~/media/oem/pdf/2013/2013-publikationer/08-10-13-vaekstplan-energi-og-klima-final.ashx

	Scotland and England have differing strategies. Scotland's Government Economic Strategy 2011 specifies 6 priorities: a supportive business environment; transition to a low-carbon economy; learning, skills and well-being; infrastructure, development and place; effective
	government; and equity.
	There is no overarching regional development strategy in England, as Local Enterprise Partnerships are the main agents in regional development. However the 2011 paper The
	Plan for Growth set out 4 ambitions:
	To create the most competitive tax system in the G20
A N	 To make the UK one of the best places in Europe to start, finance and grow a business
	To encourage investment and exports as a route to a more balanced economy
<u> </u>	To create a more educated workforce that is the most flexible in Europe.
	In Flanders, Pact 2020 sets out 20 objectives in 5 areas:
	Greater prosperity and welfare
_	A competitive and sustainable economy
Belgium	 More workers gainfully employed, in more suitable jobs, and for longer average career terms
	A high-quality standard of living
	A night-quality standard of living An efficient and effective public administration
	Germany has a strong federal governance model, so there is no general national
>	development strategy. Regional development strategy is implemented at the level of the
an	Länder.
E	Generally however, regional policy instruments aim to: reduce regional disparities,
Germany	strengthen aggregate economic growth, facilitate structural change and support
	the constitutional goal of achieving 'equivalent living conditions' Following the discontinuation of 'Peaks in the Delta', there is no explicit regional
	development policy at state level. The enterprise policy and strategy for infratsturcture and
	spatial planning work towards strengthening NL's spatial and economic infrastructure. The
	enterprise policy called 'top sectors' focuses on nine industries:
	Agri-food
w	Horticulture
The Netherlands	High-tech materials and systems
<u> </u>	Energy
.he	• Logistics
et et	The creative industry
Φ	Life sciences Charriagh
F	Chemicals Water
	As per the national strategy for regional competitiveness, entrepreneurship and
0	employment 2007-2013:
J. Se	Innovation and renewal
ge	Skills supply and improved labour supply
Sweden ⁵⁹	Accessibility
S	Strategic cross-border cooperation
0 EDD	

Source: EPRC, 2013

(iii) Research and innovation strategies for smart specialisation (RIS3)

Regional innovation policies have been promoted for almost two decades. Over time, the concept of regional innovation has evolved and become increasingly mainstream. Current developments in relation to smart specialisation are a next step in this development. ⁶⁰ Smart specialisation strategies promote the efficient and effective use of public investment in research. The goal is to boost regional innovation in order to achieve economic growth and prosperity, by enabling regions to focus on their

⁵⁸ S. Davies (2012) Policy continuity and debates about the future: Regional policy developments in Germany, 2011-12, in *EoRPA paper 12/2:A*, European Policies Research Centre, University of Strathclyde, Glasgow, September 2012 EoRPA Country Summary 2012

⁵⁹ Regeringskansliet (2007) A national strategy for regional competitiveness, entrepreneurship and employment 2007 - 2013

⁶⁰ Charles, D. et al (2012) Smart Specialisation and Cohesion Policy - A strategy for all regions? IQNeT Thematic Paper No 30(2), EPRC.

strengths.⁶¹ Smart specialisation encourages regions 'to identify the sectors, the technological domains, or the major arenas of likely competitive advantage, and then to focus their regional policies so as to promote innovation in these fields'. The Research and Innovation Strategies for Smart Specialisation (RIS3) is to be a requirement, as part of the ex ante conditionality framework, for a region wishing to draw down ERDF funds for innovation activities.

The NSRP has strong links to the general concept of Smart Specialisation and demonstrates awareness of strong innovators within the region. For example, the Programme has identified key innovation regions through the Regional Innovation Scoreboard, identifying innovation leaders, followers and moderate and modest innovators in the region. Although the NSRP recognises the value of linking Programme innovation objectives to regional innovation strategies, it has not yet mapped out the content of these regional strategies. At the time of programming, many of the RIS3 strategies are still to be finalised. However, several themes are likely to be recurring:

- creative industries;
- energy (sustainable and hydrocarbon);
- Universities and research institutes;
- life sciences/ healthcare;
- food and drink;
- financial and business services; and
- product design.

In the short term, the Programme should continue to monitor the development of RIS3 strategies and, where possible, demonstrate linkages to the NSRP priorities, particularly 'Thinking Growth'. During the implementation of the Programme linkages to RIS3 can be achieved by including selection criteria for project applications that encourage potential beneficiaries to demonstrate strong linkages to these strategies.

4.3.5 Overview

As the character and content of the new Programme has developed, the drafting team considered the Programme's links to other policies and Programmes on an on-going basis. For the NSRP, there is an enormous number of relevant EU, national, regional and territorial frameworks, strategies and policies to consider. However, the drafting team developed a detailed base of information to work from and to inform the Programme, including the SOR, ex ante inputs on the Strategic Review of the Programme, and ex ante paper on programme coherence.

Coherence is an issue that is returned to throughout the Programme draft texts. For example, links to Europe 2020 are a foundation for the programme strategy, text on each of the priorities makes reference to EU sectoral targets, and a separate section on 'coordination' is included in the OP text. Drawing on this base of information, it is anticipated that the 2014-2020 NSRP could make a productive contribution to relevant strategies. For example, the NSRP, and NSRP projects, are in a favourable position to foster relations with, and benefit from, new and existing policies and cooperation arrangements.

⁶¹ CEC (2013) Smart Specialisation, Available on: http://ec.europa.eu/research/regions/index_en.cfm?pg=smart_specialisation&lg=en

Equally, the Programme sets itself apart by noting:

- the non-territorial, non-place based approach of Horizon 2020,
- the different types of financial instruments provided by COSME,
- the wider approach taken to target groups and target areas in comparison to EAFRD,
- the strong policy focus of LIFE +, and
- the focus on core networks of TEN-T.

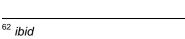
More generally, transnationality remains the core of the Programme and linked to this is the Programme's particular scope to, e.g.

- Develop joint solutions to shared challenges;
- Support up-scaling of local/regional solutions to transnational levels;
- Address transnational issues in a coordinated way at local/regional levels; and
- Work across sectors (economic sectors and organisational sectors).

The scope to work on a transnational basis means that the North Sea Region Programme draws from a significant pool of key stakeholders, and reaches beyond national policy interventions. For example, there is scope to form transnational systems involving countries with different complementary strengths. Transnational cooperation interventions can motivate actors, shape the ways in which they interact with each other and support the collaboration modes they use to tackle socio-economic or, environmental challenges.⁶² Thus, within the Programme area the NSRP has a distinct, as well as complementary role to play.

As part of the Programming process it was useful to consider the position of the Programme in relation to other policies, frameworks and programmes. However, as the Programme progresses the policy environment will also evolve and change. In order to maximise the on-going relevance and role of the Programme such changes could be monitored and considered on an on-going basis, as is now noted in the OP text.

In terms of the OP text, the ex ante evaluation team have been keen to stress that a 'process' oriented approach could be used to develop this aspect of the Programme. Thematic links are highlighted and expectations for projects are considered. However, links to policies, programmes and frameworks are also something that the Programme should consider at a strategic level, e.g. by looking at how to build/maintain Programme (as well as project) links, how to best support projects in their efforts to engage, how to monitor and record links and opportunities, how Programme contacts can facilitate links. It was also noted that a wider range of policies and frameworks could be referred to in the OP text. However, it is recognised that the number of policies, strategies and frameworks has to be considered and the word limits in the OP template mean that information can only be presented in summarised form.



Ex Ante Evaluation of the North Sea Region Programme

PART 4: DELIVERING RESULTS

Ex Ante Evaluation of the North Sea Region Programme

5. DELIVERING RESULTS: INDICATORS AND IMPLEMENTATION

5.1 Context

A results orientation is a key requirement for the 2014-2020 Programmes. Beyond having clearly defined, well justified objectives, delivering and demonstrating results requires:

- Adequate financial resources;
- · Relevant indicator frameworks; and
- Capacities and systems to implement the Programme, projects and deliver results.

In terms of financial resources, resources are expected to be in line with the objectives of the Programme. In the 2014-2020 period, Programmes also have scope to draw resources from different funding sources and use resources in new ways, such as through financial instruments.

Programmes are also required to contain a limited number of indicators with quantified targets to be achieved by the end of the Programme period. The European Commission's proposals in relation to indicators and their application to transnational territorial cooperation have been subject to debate and some uncertainty. Overall, it is recognised that the requirements are more difficult for the territorial cooperation programmes than for other ERDF programmes. Nevertheless, the same requirements apply and are summarised in Box 5.

Box 5: Programme Indicators - key requirements

Result indicators:

- should capture the change intended, to be produced by the Programme
- should have a baseline value and target value in qualitative or quantitative terms (they can be entirely qualitative);
- one result indicator per Specific Objective is required;
- should relate to the whole target 'population' not just beneficiaries; and
- should make use of evaluations to 'disentangle' the contribution of the Programme relative to other factors.

Output indicators

- must reflect the direct activities (goods and services) of the priority (what are the resources being spent on e.g. adoption/application of low energy building materials);
- can be programme specific, but common indicators must be used, where relevant can have baselines of zero;
- · relate to the most frequently implemented actions;
- · need to move beyond numbers of projects and number of solutions; and
- have milestones and targets that are unambiguous and realistic.

Intervention logic:

The selection of indicators should reflect the intervention logic – hence output indicators should, when targets are met, relate to the objectives expressed in the result indicators.

Performance Frameworks:

The performance framework can only be defined once the Operational Programmes' indicators are fixed and the financial allocations are known. A performance framework is one of the tools to achieve a result-orientation. The performance framework involves milestones and targets for each priority in the programme, which are made up of a subset of the Programme's indicators. The achievement of milestones will be assessed in 2019. While ETC programmes will not be involved in the allocation of the performance reserve, the European Commission can still apply suspensions and financial corrections for non-achievement of goals.

Milestones and Targets:

According to Annex II of the Common Provisions Regulation, both milestones and targets should be:

- realistic, achievable, relevant, capturing essential information on the progress of a priority;
- consistent with the nature and character of the Specific Objectives of the priority;
- transparent, with objectively verifiable targets and the source data identified and, where possible, publicly available;
- verifiable, without imposing a disproportionate administrative burden; and
- consistent across the programmes, where appropriate.

Delivering results is also a theme which is at the heart of requirements for the management and implementation of the 2014-2020 Programmes. In programme management terms, a stronger performance focus implies a stronger emphasis on effectiveness and efficiency in the different stages of designing, implementing, monitoring, evaluating and auditing programmes or specific interventions and projects.

All programmes must include detail on implementation provisions, including a description of the key institutions involved in their management and implementation, and details of a range of operational issues such as arrangements for monitoring and evaluation, data management, accounting, monitoring and financial reporting, financial flows, publicity and information and the partnership principle. Regulations for the management and implementation of transnational cooperation programmes are set out in the EU provisions for the support from the ERDF to the European Territorial Development Goal.

5.2 Establishing frameworks and structures

Agreeing and establishing these elements of the Programme was a demanding process. Discussions on financial allocations have in some instances been comparatively smooth, e.g. on proposed cofinancing rates, and proposed spread of resources across areas of intervention. However, finalising the final budgets has been delayed due to a number of issues.

Developing appropriate indicator frameworks has involved a number of stages and processes. Developing appropriate indicator frameworks has been one of the more challenging elements of the programming process. Recognising the demanding nature of the task, the drafting team actively engaged in discussions with the European Commission, Interact, and other ETC programmes on this issue. The ex ante evaluation team was also closely involved in the development of the Programme's indicator frameworks. As a result, the indicators have progressed through various drafts and reflected the evolution of the Programme's strategic thinking on the priorities and objectives.

Some of the key issues noted by the evaluation team are set out in Box 6.

Box 6: Evaluation Comments provided during drafting process

- The requirement to deliver results and meet targets has considerable practical implications for the
 Programme. All the Programme' objectives, priorities and targets have to be realistic, practical and
 deliverable, making it essential to consider exactly where the NSRP can make its most effective and
 efficient contributions. This clarity is invaluable when considering how the Programme will capture and
 convey its results.
- There are very real practical constraints on to what extent a transnational territorial cooperation programme can deliver in terms of meaningful, easily quantifiable results.
- Acknowledge that appropriate result baselines and targets will take time to establish.
- Can have quantitative measures using qualitative methods In terms of developing baselines, the
 Commission has been clear that qualitative indicators can be used. While this could allow for short,
 focussed descriptions of key development issues to be used, this could also incorporate the use of
 qualitative methodologies (such as interviews or selective surveys) to develop quantitative data, e.g.
 ranking issues on scales etc).
- Reduce the number of output indicators.
- Avoid activity indicators In the formal tables outputs indicators have to be based on the direct outputs
 of programmes, e.g. the products or services co-financed by the Programme. However, activity
 indicators may be useful for the Programme's own monitoring systems.
- Need to make result indicators objective take out 'value statements' from the wording of the result
 indicator, e.g. improvement, increase etc. The aim should be that the indicator is something that can be
 measured, e.g. when measuring distance use 'kilometres', not 'increased kilometres'.
- Indicators (innovation): Number of policy/strategy/political agreements adopted in partner organisations
 this doesn't relate well to the main objectives of the Priority and isn't very clear what it covers
- The results indicators proposed are more like output indicators. The output of the priority/projects will be improved services etc. The result is something more like increased collaborative transnational working, more SME/R&D/Public sector collaboration/links, productive engagement in the networks, or application/adoption of the services, policy awareness of solutions
- Definitions and clarity definitions may be required for key terms.
- In early drafts of the indicator framework, there were some differences in presentation and conception in the proposed indicator framework, which made the 'logic' and linkages between the proposed indicators unclear. Loose or unclear wording could also make the potential 'measureability' and the identification of indicators difficult.

As the preceding section identified, the NSRP must deliver tangible outputs and results. It must also do this in an effective and accountable manner. EU guidance on the management and implementation of the 2014-2020 Programme set out formal requirements in terms of the roles and functions of key institutions. Part of the ex ante evaluation was to ensure that these requirements were met. The Programme established a dedicated drafting team to work on management and implementation elements of the Programme. Their work has drawn on:

- The EU regulations, draft and final guidance notes and fiches;
- On-going evaluation of the 2007-13 Programme, which focussed heavily on administrative issues;
- Internal assessment of past and current NSRP implementation frameworks and approaches;

- General evaluations of the management and implementation of territorial cooperation programmes; and
- Stakeholder feedback and input.

5.3 Ex ante Assessment

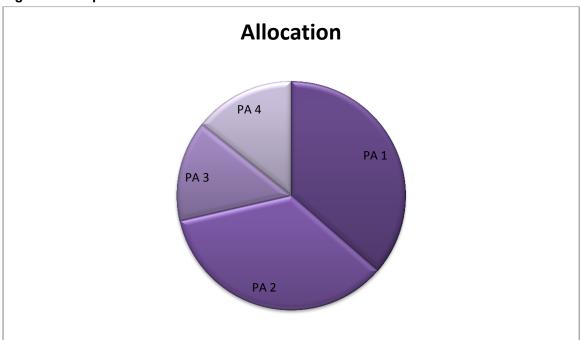
As part of its assessment key questions for the evaluation team are:

- Consistency of the allocation of budgetary resources with the objectives of the programme?
- Verify the 'appropriateness' of the structure and hierarchy of the objectives and the indicators identified by the Programme, by considering:
 - o whether there are clear causal links between the proposed Programme outputs, results and impacts; and
 - the manageability and usefulness of the indicator system?
- Are suitable procedures in place for data collection and utilising the data to allow for effective programme monitoring and evaluation?
- Has the Programme engaged with partners effectively and how will these relationships be managed on an on-going basis?
- Are appropriate monitoring, reporting and financial control systems in place?
- Consider assessment of the administrative burden for beneficiaries and, where necessary, the actions planned accompanied by an indicative timeframe to reduce administrative burden.

5.3.1 Financial Allocations and Interventions

The proposed balance of financial allocations is set out in Figure 15.

Figure 15: Proposed Financial Distribution



It is anticipated that, the resources are in line with the needs identified, aims of the Programme and results targeted. The allocations also take into account past experience and likely demand, as

indicated through partner consultation exercises. The 'weighting' of resources also reflects the Programme's strong emphasis on 'innovation' through in particular PA 1 and PA 2.

As well as the four thematic Priority Axes, the Programme will have a Priority Axis 5, technical assistance (TA). Negotiations on the extent of the TA budget have been, at times, challenging, due in part to the conflicting pressures faced by Member States to reduce costs where possible but acknowledge the considerable, and costly, administrative demands placed in programmes linked to, e.g. the need to effectively monitor and deliver results.

For the main Priority Axes, a co-financing rate of 50 per cent was agreed early in the programme drafting process and was reviewed again prior to OP submission. It was noted that a 50 per cent rate was comparatively low in comparison with some other transnational cooperation programmes, which are proposing rates of 60-65 per cent. Additional points to consider are the ongoing impacts of the economic crisis and related budget cuts across the public sector, which could lead to increased difficulties for partners obtaining high levels of match funding. Despite this, the decision was taken to retain the 50 per cent rate and there was confidence that the Programme would attract good projects. Establishing a well-managed, well-targeted, 'user-friendly' Programme was seen as the most important way to attract good quality projects and partners. Also, a 50 per cent rate allows the Programme to increase the number of projects supported and, related, maximise its results.

The opportunities to use e.g. financial instruments, major projects and integrated territorial investment were assessed by the drafting team, evaluators, content group and PPSG. Based on a number of factors, including administrative complexity, the scale and scope of the programme, and project types, the decision was taken not to pursue these options at this stage.

5.3.2 Programme Indicators

Key questions when considering the proposed indicators include: are they in line with the Programme's intervention logic, and are they manageable and useful?

(i) Result indicators

Setting result indicators was challenging, as has been the case with many ETC programmes. A number of factors meant that using existing statistical sources to establish highly quantitative Programme level results indictors, baselines and targets was not possible or useful. Factors include:

- The scale of the Programme area;
- The types of area/activity where NSRP transnational territorial cooperation can best add value
 are not interventions that will exert a direct, easily quantifiable impact at the Programme level;
 This places considerable limitations on the suitability of existing statistical sources as a basis
 for the indicators; and
- The issue of proportionality had to be taken into account when developing any additional systems for quantitative data generation.

The Programme's proposals to pursue more qualitative approaches to setting and measuring results can address some of these challenges, and allows the Programme to fulfil Commission requirements to have results baselines and targets for the Programme area as a whole. The Programme is required to have one indicator per Specific Objective, which captures the change intended and is related to the

whole target population. In establishing results indicators the Programme has kept strong focus on needs to improve and build capacity in:

- Knowledge partnerships;
- Innovation support;
- Green growth;
- · Environmental quality; and
- Sustainable transport.

Capacity building is an area where the Programme has scope to make a contribution at the Programme-level through effective dissemination and application of outputs. It builds on, and develops, existing strengths, and pushes towards changes that can be directly linked to the Programme. Capacity building is an issue that is implicit throughout the programming process, but was introduced into the indicator frameworks at a later stage.

In terms of the indicators themselves, the ex ante team has highlighted a number of key points during the development process including the following:

- The Programme's focus on results in terms of capacity building has to be drawn throughout the framework of indicators. At some stages in the process the rationale for taking capacity building as the main focus was not fully clear. Proposed Programme outputs appeared to be more in line with the potential results that should be sought. In contrast, the concept of 'capacity building' appeared to better fit the outputs that would help to achieve these results. However, while it is possible for a project to measure e.g. passenger numbers using green transport, or reductions in carbon emissions that resulted from the project, making this link for Programme level results is considerably more challenging. Given the Programme's resources, key project types, and scale of the Programme area attempting to capture such change at the Programme-level was not considered appropriate, and could run the risk of 'setting the Programme up to fail'. Instead, capacity-building in key areas is the common theme that runs through each of the Priority Axes and is where the Programme can exert Programme-level influence and change.
- The Programme's efforts to reduce the current number of output and result indicators as far as possible was supported by the evaluation team, as this will:
 - o help to ensure the remaining indicators are focussed on key Programme objectives,
 - o heighten the perceived relevance of the indicators, and
 - o reduce the administrative burden of collecting and assessing the indicators.
- Looking to the future, another point to note is that in order to maximise the 'use' and usefulness of the data, effective communication with the institutions involved in gathering and using the data is crucial, and clear explanations are essential.
- Capacity to deliver on the Programme's proposed results does demand a considerable commitment to the overall goal of capacity building. The Programme will have to take a strategic role in supporting projects in their efforts to contribute to Programme-level results. The proposed results are not something that necessarily 'happen' automatically as a result of the projects outputs. The outputs will have to be actively applied, disseminated and adopted which is a 'phase' in the lifespan of projects that the Programme should give particular consideration to.

(ii) Output indicators

The proposed output indicators were developed in line with the Programme's overall focus and the focus of the Specific Objectives. The output indicators are generally easy to understand and interpretation/definitions have been provided where necessary. The output indicators are a step forward from simply 'measuring numbers of projects, meetings etc' and increasingly focus on what the projects, and Programme, expect to produce.

The accompanying definitions/explanations provided during the drafting process also help to clarify the focus of the indicators, and will be useful for developing supporting material for projects stakeholders.

Feedback on the output indicators was provided throughout by the ex ante evaluation team and many of the issues raised have been addressed. Worth noting are the following points.

- The direct relevance of the indicator proposed for thematic Objective 1.1 (Number of enterprises cooperating with assisted knowledge institutions) was questioned by the ex ante evaluation team, as aim of the intervention is more than just greater engagement with enterprises.
- On a more general level, the relevance of indicator 0.0 Number of organisations/enterprises informed about new solutions by projects end was questioned, as it did not appear to link to a Priority Axis. However, the inclusion of this indicator is a key that links the output indicators to the Programme result indicators, and their emphasis on capacity building. It is an inclusion which aims to look at how projects themselves have worked to disseminate, inform and apply their outputs.

(iii) Use of common indicators

The Common indicators provided were considered in detail. A small number had some relevance to the types of activity planned by the Programme, for example indicator 1.1 Number of enterprises cooperating with assisted knowledge institutions. However, even in this cases their direct relevance to the specific intervention logic of the Programme was limited, e.g. as has been mentioned, the ex ante evaluation team have questioned the use of number of enterprises cooperating with assisted knowledge institutions as a main output indicator for priority 1.

(iv) Intervention logic

As has been noted, capacity building is a core theme running through the framework of indicators and the Programme itself. As such it is also at the heart of the Programme's intervention logic, which takes into account the needs on the ground, the nature of the Programme, Programme resources and scope to deliver change. For each Priority Axis it is possible to:

- note the need to develop capacity in a specific field, as a means to support economic growth, lead innovation and promote sustainable, inclusive development in the North Sea Region,
- identify ways in which the Programme can add value to existing policies and programmes through its interventions, and
- see how the Programme can deliver results, see Figure 16 and Figure 17.

Figure 16: Intervention logic

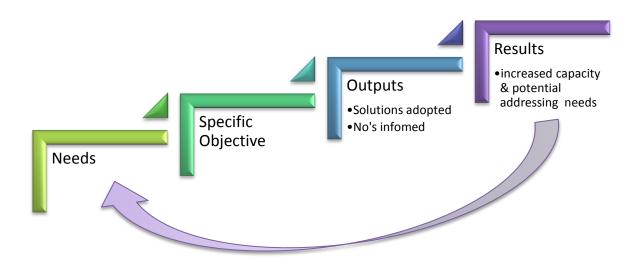
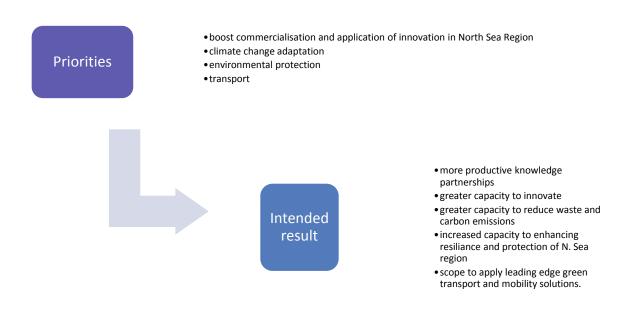


Figure 17: Needs - Results



5.3.3 Methodology and definitions

As has been discussed, given the nature of the Programme's activities and the type of change it seeks to address qualitative analyses were identified as the most realistic option for capturing and assessing the required programme-level results, setting result baselines and establishing result targets. In order to achieve this, the ex ante evaluation team developed a methodology in partnership with the drafting team. The evaluation and drafting teams discussed a variety of options, taking into account the availability of data, proportionality, and the reliability and validity of results.

Qualitative research will be used to generate baselines of conditions at the start of the Programme period and set result targets. Work on developing result indicators will be finalised within 12 months of the Programme's approval. The proposed methodology also aims to be replicable for monitoring purposes; proportionate to the Programme's resources; in line with Programme goals; and based around definitions of key terms and indicators used by the Programme.

The proposed methodology comprises of four main elements:

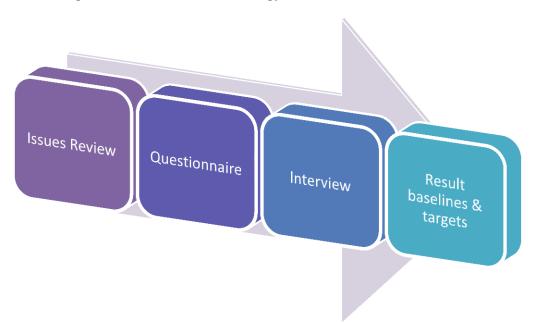


Figure 18: Setting reults indicators: methodology

These elements allow for the final result baselines and targets, and subsequent assessments of progress, to draw on data that is triangulated from more than one source, thus ensuring more robust, rigorous assessments.

a) Issues review

The review will draw on existing sources to establish an overview of agreed conditions in the Programme area, including the Programme's area analysis, Strategic Orientation Report, and ex ante Strategic Review. At this stage, the aim is not to open a debate on the issues being addressed by the Programme, but simply to provide additional thematic insights and detail to inform subsequent phases of the research. For future monitoring purposes, it is recommended that Programme reports and

evaluations are also considered. This review will also allow the range of external factors that can influence change to be factored in and considered.

b) Questionnaire

Based on the issues review a short, targeted on-line questionnaire can be developed for circulation to relevant participants. Questions will focus on: perceived overall strengths and weaknesses in relation to the topic covered by the indicators. At this stage, it is possible to build in a more quantitative aspect to the work. This could be achieved using a rating system (scale of 1-5) to 'quantify' relevant elements previously identified in the issues review. Building in a more quantitative element to the overall approach allows for greater comparability.

Surveys can suffer from low response rates and, if circulated too widely, not all respondents are equally well informed. Therefore, the aim is to focus on a selected group of respondents and use the questionnaire as a preliminary, preparatory step in advance of a more in depth interview. For monitoring purposes, using the same respondents, or at least respondents from within the same institutions, should be used if possible.

Participants will be thematic experts in areas relevant to each of the Priority Axes, key criteria include:

- Relevant thematic expertise;
- Knowledge and understanding of the scope and scale of transnational cooperation activities;
 preferably some previous involvement with the Programme;
- · Knowledge of national context in relevant field; and
- Good spoken English.⁶³

It is important to establish a 'neutral', non-biased view, especially for Programme monitoring, thus taking into account potential conflicts of interest on the part on respondents is important. Yet, a thorough analysis of conditions does require highly specialist knowledge of the Programme area as a whole and of the Programme's actions. This suggests that some respondents will have (or may have in the future) some connection to the Programme. These links will be taken into account by the research team.

c) Expert panel interviews

A final stage will be elite interviews of thematically and area-relevant groups of experts to finally establish an agreed baseline position/indicator for the Programme area and result targets. The interviews could be:

- structured around a standardised interview schedule, which captures the key relevant issues, and definitions of the prevailing conditions;
- target experts working in fields in relevant to Programme's Priority Axes;

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⁶³ adapted from CENTRAL EUROPE 2020 Programme, Concept for establishing result indicator baselines and measuring progress.

- use participatory appraisal approaches to generate statements and understandings which can be used to inform the baselines, by involving experts that have an appreciation of/have been involved in transnational cooperation in the Programme area;
- · incorporate input from experts in all of the NSRP Member States; and
- provide comparable data by using a structured interview schedule.

d) Presentation of findings

The data analysis will be presented in a report to accompany the baselines set. The report will provide a detailed note on the methodology, set out key conclusions, and identify any challenging and divergent views and explain how these are reflected/reconciled in the analysis.

5.3.4 Milestones and targets

Establishing appropriate, realistic, yet ambitious, milestones, targets and performance indicators is a challenging task. In a number of cases it has not been possible to set values for the selected indicators. For example, in the case of output indicators all baselines are set at zero. Baselines for the Programme's result indicators will be set following a dedicated review of conditions in the programme area.

Within the Programme's overall framework of milestones and targets, the performance framework is a tool to help achieve a results orientation for the Programme. ⁶⁴ Milestones and targets are defined for each priority. The achievement of milestones will be reviewed in 2019 and in 2023. According to Annex II of the Common Provisions Regulation, milestones and targets shall be:

- realistic, achievable, relevant, [and] capturing essential information on the progress of a priority;
- consistent with the nature and character of the Specific Objectives of the priority;
- transparent, with objectively verifiable targets and the source data identified and, where possible, publicly available;
- · verifiable, without imposing a disproportionate administrative burden; and
- consistent across the programmes, where appropriate.

They should include key implementation steps, financial indicators and output indicators.

Where values and targets have been set the figures draw on past Programme experience and informed judgements about the likely character, scope, scale, and number of projects supported. However, the following questions/issues could be raised:

- linked to previous comments on the relevance of the output indicator for Priority Axis 1
 Specific Objective 1, careful consideration should be given to its inclusion in the performance framework.
- A key implementation step for each Priority Axis is 'number of applications received and assessed'. A footnote then notes the expectation of an approximate 50 per cent approval rate.

⁶⁴ CEC (2014) Guidance fiche; Performance framework review and reserve in 2014-2020, Version 6, 4 March 2014 http://ec.europa.eu/fisheries/reform/emff/doc/09-performance-framework_en.pdf

If half the target number of projects is approved, the target set for subsequent outputs, i.e. number of products, services and processes, could be ambitious. For example 15 projects with 54 outputs for Priority Axis Two?

However, more generally:

- Milestones are realistic, based on reasonable assumptions about the budget and number of projects, and take into account the proposed spread of funding across the priorities and the results targeted,
- Output milestones reflect the Programme's commitment to developing new products, services and processes to develop capacity in key areas of North Sea Region strength and opportunity.
- The Programme has a good history of strong commitment levels, high disbursement rates, and successful projects. On this basis the Programme's financial milestones are considered to be achievable.
- Implementation milestones also take into account past experience in terms of the number of project applications.
- The performance framework set out in the OP document is:
 - based on a sound assessment of the likely progress of the Programme, its outputs and results;
 - o covers relevant aspects of Programme implementation and progress;
 - output milestones set focus on the core elements of the interventions, and the Programme, i.e. delivering new measures and solutions;
 - o implementation milestones are in line with past experience.

Reliable data for all the elements of the framework will be readily available in implementation reports and project progress reports.

As has been noted, baselines for output indicators are set at zero, which is in line with Commission guidance on the issue. Baselines for result indicators will be set according to a rigorous methodology. This methodology can be replicated to measure progress towards programme targets. It is anticipated that as part of the process of setting baseline values the issue of setting target values for results can also be addressed.

5.3.5 Delivering results: management and implementation

Work on developing appropriate systems and structures for the management and implementation of the Programme progressed at pace on many key issues, although agreement on a small number of technical points did prove challenging. Nevertheless, the result is a well-justified approach, which takes into account lessons from past experience, builds on existing strengths and takes into account new requirements and opportunities for the 2014-2020 period, most notably simplification and the results orientation.

(i) Key Structures

The Programme sets out a detailed account of appropriate implementation provisions. The structures adopted are broadly in line with the arrangements in place for the 2007-13 NSRP, and in doing so carry forward considerable strength and expertise.

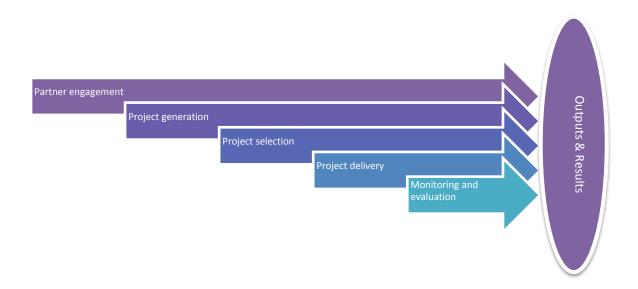
- Managing Authority Danish Business Authority
- Certifying Authority Central Denmark Region/Accounts department
- Audit Authority Danish Business Authority
- A Joint Secretariat will be established, as part of the Central Denmark Region.

Some key issues considered in establishing these structures are: simplification and additional roles and responsibilities, especially in relation to ensuring and monitoring outputs and results.

(ii) Cycle of Programme Management – leading to results

The key components of the Programme's management and implementation structures were developed with a view to meeting the demands of the results orientation, drawing on lessons from past experience, and fulfilling requirements for simplification and reductions of administrative burdens, see Figure 19. Much of the detail on management and implementation will be included in a programme handbook/manual and are not part of the formal OP. Thus, this review strays beyond a narrow focus on the OP text. However, by taking into account wider discussions, the evaluation can develop a better picture the capacity of the Programme to deliver results and operate smoothly.

Figure 19: Implementation and results



The 2007-2013 NSRP undertook an in depth evaluation of its management and implementation as part of its on-going evaluation. As part of the Programme development process evaluation results were considered and have informed the development of systems and structures for the 2014-2020 Programme. Some of the key points to take on from the 2007-13 programme experience include the following.

Partner engagement and project generation

- At the launch of the Programme a shared, strong common understanding of what the Programme wants to achieve and what it expects from projects is essential.
- The 2007-13 Programme is noted for its proactive effective, and innovative, approaches to communications, e.g. via the Programme web-site.
- In order to develop sufficient high quality projects in some fields of activity, the Programme had to undertake additional activities and actions, which proved successful.
- The Programme has considered how to attract and appeal to new partners and progress from its partner base established in the 2007-13 period. Of particular note is an openness to private sector involvement in the Programme, the value of SMEs.
- Past and current stakeholders described the project development process within the NSRP as good. Stakeholders identify the role of the secretariat as particularly helpful during the project development phase. Also of particular value were workshops organised by the NSRP and the direct feedback given by the secretariat during the project development phase. Looking to the future.
 - the pre-assessment of project ideas was considered useful option to explore;
 - efficient partner searches connection with efficient, well-defined roles for National Contact Points (NCPs) and links between NCP through co-operation structures.
 - advice on realistic project planning and budgeting was also considered to be valuable.⁶⁵
- Some project promoters had problems in conveying their ideas on paper. 66 With this in mind, other tools could be considered to help visualise/communicate the results and impacts of the projects.

Project selection, development and delivery

- The Programme has benefitted from a good range of project applications and an element of competition in the selection rounds.
- Heightened exchange of experience between lead beneficiaries was considered beneficial, (e.g. through training seminars or virtual platforms).⁶⁷
- Lead partners need preparation and training for their challenging role to administer and manage international consortia. Lead beneficiary seminars before project start are useful. However, continuous training throughout the project's lifecycle could also help. Furthermore, exchange of experience between lead beneficiaries and projects should be actively encouraged by the Programme.⁶⁸
- National contact points in place for the 2007-13 NSRP Programme are valued as a strong link
 to the national and regional levels. Looking to the future, a way to further strengthen this role
 and enhance support to projects is to develop a more uniform provision across all the NCPs
 and networks their activities in order to promote exchange of experience.
- Open links and communication between the secretariat and projects will be key in the 2014-2020 Programming period in order to ensure that projects are meeting targets and on course

67 Ibid

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⁶⁵ DSN Analysis and Strategies Management (2013) On-going Evaluation of the NSRP 2007-13: Institutional Capacity and Performance

⁶⁶ ibid

⁶⁸ Ibid

to deliver outputs and results. The Programme has a performed well in this area in the past, e.g. with communication and interaction between the secretariat and the projects functioning well. Projects state that the secretariat is friendly and helpful, provides prompt and comprehensible responses to questions and is clear in providing reference of whom to contact at the secretariat in case of any queries. ⁶⁹ Looking to the future, the secretariat may have to look at ways to focus and direct its communications with the projects. At the same time however, the limited resources of the secretariat are widely recognised.

 The Commission's own emphasis on tangible outputs also implies that Programme's focus should be on developing practical, solutions to shared development concerns, which could imply wider project partnerships involving public, private and research-based organisations.

Monitoring and evaluation

- An element that has thrown up particular challenges is the management of the FLC process, which suggests a need to ensure the quality of FLC and clarifying the role of different bodies in FLC.
- Project beneficiaries have found reporting of indicators challenging. The reporting of
 indicators focuses mainly on information required by the NSRP and the European
 Commission. The 2007-13 indicator system was not considered as useful for providing
 measures which facilitate the management and steering of projects. Accordingly, the
 awareness among projects regarding the relevance of indicator system for steering for the
 whole NSR is weaker.
- Past payment interruptions mean that the Programme is very aware of, and sensitive to, control and audit issues. Particular efforts are being made to streamline and review audit procedures, but also ensure transparency and quality.⁷¹
- Initially the Programme set out to build on an existing on-line monitoring system. However, following an exploratory period and greater clarity on the demands of e-cohesion, the decision was taken to develop a new dedicated system.
- As well as meeting the demands of Programme bodies and the European Commission, the aim for data gathering is to develop systems that are in line with the overall goal of simplification, where possible, and the needs of project partners. The Programme is aiming to strike a careful balance between providing the volume of information required for monitoring and evaluation exercises, while not placing undue burdens on project partners.
- The Programme has undertaken a valuable on-going evaluation exercise. However, the
 evaluation reports were completed in the latter stages of the Programme and focussed
 strongly on more 'administrative issues'. An earlier more strategic evaluation report could be
 useful in the future.

Also informing systems and approaches for the 2014-2020 Programme are demands for simplification and harmonisation. The Programme is recognised as having had effective and efficient systems in place for the 2007-13 period and can build on this expertise. Looking to the 2014-2020 period, simplification and opportunities for harmonisation have been considered throughout. Specific measures introduced include:

70 Ibid

⁶⁹ Ibid

⁷¹ NSRP (2013) OP draft, p. 113

- A two-step application process is under discussion. Such an approach could help:
 - reduce the overall burden, and risk, of developing an initial application for the applicants, particularly during a period of some financial austerity where resources to commit to project development are potentially more limited;
 - encourage new partners to the Programme, by offering an initially simpler application process;
 - lead to higher quality 'full' applications;
 - as it offers the Programme the opportunity to advise or 'steer' project content and ensure a more strategic, results oriented approach, e.g. through providing feedback from the Monitoring Committee, Secretariat or contacts points;
 - by leading to wider, stronger project partnerships, allowing an initial grouping to develop a first-step proposal and then look at ways to widen the partnership in the lead up to a full application; and
 - o build on the perception of the Programme as accessible and user-friendly.
- Where relevant, use HIT tools will be used in a critical and informed way to simplify formats for collecting information from beneficiaries.
- The Programme is engaged in efforts to be considered in terms of data collection requirements. While acknowledging the demands from users such as auditors, the aim is to limit the required data to what is useful and necessary;
- The Programme will introduce simpler, harmonised eligibility rules, e.g. with five standard budget lines and flat rate overheads.
- E-Cohesion. The Programme is already well advanced in this area. The aim for the 2014-2020 period is to save time and reduce costs and errors.
- Clear targeted training to all beneficiaries on key issues.
- Development of clear, consistent rules and guidance, especially on payment and control.

While many measures can be introduced to simplify and harmonise Programme systems and structures, it is recognised that many tasks in Programmes of this nature remain inherently complex and challenging. Where this is the case additional support, information and explanation can be provided. Taken together, lessons from past programme experience and responses to the new demands for 2014-2020 Programmes mean that the NSRP has established appropriate structures for the management and implementation of the Programme. A number of more administrative elements will be finalised following submission of the OP text and will form supporting material for partners.

5.3.6 Overview

The ex ante team has considerable understanding of the significant challenges involved in producing meaningful, useful and proportional indicator frameworks for the Programme. The aims in developing the indicator and performance frameworks were to retain a strong focus on the specific actions of the Programme and where it can best deliver change.

The aim to use indictors directly in line with Programme interventions means that data availability was an issue for the Programme, especially for result indicators and targets. The evaluation team recognise that existing statistical sources have limited use in providing relevant indicators for the Programme. Therefore, the decision to pursue more qualitative approaches was supported, and work

was undertaken to support the Programme in developing a methodology for establishing result indicators and targets and future monitoring of progress. As with the indicators themselves, the accompanying methodology for developing the indicator baselines and targets has to be proportional to the scale of the Programme and its resources. Therefore, targeted inputs from key experts are used.

A potential criticism of the proposed indicators is the of focus on 'capacity' and 'potential' in the results indicators - they could be viewed as a step towards delivering change, as opposed to change in itself. Related, proposed output indicators are very much more in line with what one would assume would be the targets for the Programme. However, the Programme has to consider where it can make a direct and measurable impact or contribution to positive change. As noted, capacity building is an area where the Programme has scope to make a contribution at the Programme-level, through effective dissemination and application of outputs.

An additional potential criticism is the definition of some indicators and potentially differing interpretations of indicators. However, the drafting team have developed definitions and explanations of key terms, which seek to address this issue and help stakeholders working with the indicators and reporting on them.

Although targets have not yet been set for result indicators, the proposed targets and milestones for output indicators and the performance framework are generally realistic, and draw on past experience and an overview of initial demand. Similarly, proposals for the Programme monitoring system are advancing and are expected to be a step-forward from the current period.

Taken together, lessons from past programme experience, and responses to the new demands for the 2014-2020 period mean that the NSRP has established appropriate structures for management and implementation. A number of more administrative elements will be finalised following submission of the OP text and will form supporting material for partners, key issues to bear in mind include:

- Ways to engage new partners, and in particular the private sector;
- Clear and focussed guidance and training for partners, (particularly covering the results focus and what it means for projects);
- New expectations and pressures on projects, the implication of the Programme's focus on capacity building means that Projects and also the Programme have to look beyond outputs to how the outputs can be disseminated, applied and used;
- What role is there for different project 'types', clustering projects, as in the 2007-13 period could prove a useful way to promote outputs and results;
- Project support is potentially going to be even more demanding in the future, with more
 pressure on the secretariat and contact points to deliver advice, guidance, 'informal
 monitoring/trouble shooting';
- The Programme has a more explicit focus on delivering tangible products services and processes. Information and guidance on what this entails for projects could be valuable.

PART 5: STRATEGIC ENVIRONMENTAL ASSESSMENT

Ex Ante Evaluation of the North Sea Region Programme

6. SEA: INTRODUCTION

6.1 Objective of the Strategic Environmental Assessment

The objective of this Strategic Environmental Assessment (SEA) is to compile a report that improves the environmental dimension of the INTERREG North Sea Region Programme for the 2014-2020 period.

In the context of programme preparation, SEA represents a tool for greening plans and programmes and for improving their overall logic, consistency and effectiveness. The purpose of the SEA is to secure positive environmental impact through constructive participation in the programming process.

The findings of the SEA are not binding on an authority, but they allow scope to create targeted environmental impact. This means going beyond conventional environmental protection to secure environmental gain, defined as the attainment of environmental benefit as a direct or indirect result of economic development activity. In such a scenario, positive environmental impact is envisaged as a result of environmental integration, with development programmes enhancing the environment through innovative measures.

This report has been prepared in accordance with Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, which describes its objective as:

'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans with a view to promoting sustainable development' (Article 1).

Article 2 of the Directive defines relevant plans and programmes as including those co-financed by the European Community, and which are likely to have significant environmental effects. Article 3 specifies that an environmental assessment should be carried out for plans and programmes related to activities in agriculture, forestry, fisheries, energy, industry, waste management, water management, telecommunications, tourism, town and country planning or land use, and which set the framework for the development consent of projects listed in Annexes I and II to Directive 85/337/EEC (environmental impact assessment), or which, in the view of the likely effect on sites, have been determined to require an assessment pursuant to Article 6 or 7 of Directive 92/43/EEC (habitats). Projects are defined as construction works or other installations and schemes, and other interventions in natural surroundings and landscape, including those involving the extraction of mineral resources. Criteria for such projects emanating from the programme and steering development consents could comprise limits on the type of activity which is permitted, or conditions to be met by an applicant if permission is granted, or the preservation of certain characteristics of the area concerned.

As the North Sea Region Programme 2014-2020 encompasses and addresses a number of these activities, and has the potential to deliver or support projects that could produce significant (positive and negative) environmental effects, it fulfils the Directive's screening criteria for being subject to Strategic Environmental Assessment.

⁷² Article 1(2) of the EIA Directive.

The main steps of the SEA process comprise preparation of an environmental report, consultations with environmental authorities and the public, incorporation of the results of the consultations into decision-making, provision of information on the decision, and suggesting indicators for monitoring the effects of the programme during its implementation. The environmental report identifies likely significant effects of the programme on the environment, taking into account the programme's objectives and the consideration of alternatives, the contents and level of detail of the programme, the stage in the decision-making process, and the extent to which certain matters are more appropriately discussed at different levels in order to avoid duplication.

The SEA Directive states that the environmental authorities must be consulted with regard to the scope and level of detail of the information to be included in the environmental report, contributing to the definition of the content of the report and the fields to be covered. For the North Sea Region Programme, these consultations took place as part of the compilation of the country-specific environmental baseline and trend information from which Strategic Environmental Issues were subsequently identified. These issues were then utilised within the structure of the Strategic Environmental Assessment of the NSR programme.

6.2 Key Facts

Information on the North Sea Region Programme for 2014-2020 is presented in Table 13. These key facts identify the programme boundaries, explain the programme rationale, and specify a contact point where further information can be obtained. The programme's extensive territorial coverage is illustrated in Figure 20.

Table 13: North Sea Region Programme Key Facts

Managing Authority:	Danish Enterprise and Construction Authority, Vejlsøvej 29, DK-8600, Silkeborg
Programme Title:	North Sea Region Programme 2014-2020, European Territorial Cooperation INTERREG V
Programme Rationale	The North Sea Region Programme 2014-2020 will allow the regions around the North Sea to join forces and work together on developing and testing more efficient and effective solutions to the main economic, environmental and transport challenges facing the region. The NSRP 2014-2020 is a programme for experimentation and innovation with a view to changing the NSR through the power of good examples. By evaluating impact through the extent to which non-partner organisations take up new methods, the NSRP aims to define a transnational agenda for future-proofing the programme area against the most important challenges awaiting the North Sea Region.
Programme Duration:	The programme will run for seven years from 2014 until 2020.
Programme Area:	The eligible regions include the whole of Norway and Denmark, eastern parts of the United Kingdom, three provinces of the Flemish Region of Belgium, the north-western regions of Germany, northern and western parts of the Netherlands, and the southwestern area of Sweden.
Contact Point:	The North Sea Region Programme Secretariat Jernbanegade 22, DK-8800 Viborg, DENMARK Tel.: +45 7841 1770 Fax: +45 8660 1680 Website: www.northsearegion.eu



Figure 20: Map of Programme Area

6.3 Programme Context

To set the Strategic Environmental Assessment of the NSRP 2014-2020 in context, it is important to consider the scale, scope and position of the programme, as well as the role of EU territorial cooperation more generally.

Territorial cooperation has been implemented through the long-standing INTERREG initiative, funded through the European Regional Development Fund. Introduced in 1990, INTERREG has evolved over five funding periods, and territorial cooperation is now one of the three EU Structural Funds objectives. Under the current arrangements, territorial cooperation is subdivided into cross-border (Strand A), transnational (Strand B) and interregional (Strand C) cooperation. The transnational cooperation programmes, of which the NSRP 2014-2020 is one, cover larger areas of cooperation and focus on encouraging regions from different countries 'to work together and learn from each other through joint programmes, projects and networks'.73

⁷³ http://ec.europa.eu/regional_policy/cooperate/cooperation/index_en.cfm

The incorporation of territorial cohesion as a third dimension of regional policy has focused increased attention on the potential role of programmes, such as the NSRP, to deliver more tangible results. Already, in terms of the qualitative impacts of territorial cooperation, the added value of European territorial cooperation is difficult to dispute:

- cooperation programmes can address areas of significant political and symbolic added value;
- cooperation enables specific territorial problems to be tackled that could not have been addressed through other support programmes;
- opportunities are provided for learning and the exchange of experience;
- different types of organisation which do not regularly work together can be brought together;
 and
- activities can result in a significant increase in the number, intensity and dynamics of crossborder contacts at national, regional and local levels.⁷⁴

However, the comparatively limited budget allocated to cooperation programmes restricts their scope to produce large-scale tangible impacts. Additionally, the character of INTERREG B (such as the NSR programme), focusing on larger geographic areas and often involving networking activities, limits their 'concrete' impact even further.

These broad considerations can all be applied to the 2014-2020 NSRP. However, it is also worth noting the particular scale, position and scope of the programme. The scale of the programme area and population, in contrast to the comparatively modest resources available, means that the NSRP cannot expect to deliver major change on key economic, environmental and social concerns at the programme level. Additionally, the NSRP has to operate within a congested policy environment. The programme has to consider its place/position in this context and where it can best add value. In doing so, it has had to take into account:

- where the role of the NSRP may be limited, as other policies and programmes may be better adapted to addressing selected development concerns; and
- the scope for synergies with other policies and programmes on specific issues.

The programme's focus is also restricted by European Union Cohesion policy regulations and domestic policy priorities. According to the EU regulation, transnational cooperation programmes are expected to be selective in their focus and be results-oriented. From a prescribed list of 11 thematic objectives set out in the Common Strategic Framework, the NSRP had to choose a limited number of themes, and within the selected themes the programme was then required to select a number of investment priorities and develop its own Specific Objectives. Actions were also expected to be in line with areas of activity highlighted as relevant for transnational cooperation programmes.⁷⁵ In addition, the programme had to develop in line with domestic policies and agendas for territorial cooperation. Taken together, these frameworks and regulations mean that the programme is, to an extent, limited in terms of the issues with which it can directly engage.

⁷⁴ M Ferry and F Gross, *The Future of Territorial Cooperation in an Enlarged EU*, Paper prepared for 2nd International Conference, Benchmarking Regional Policy in Europe, Riga, 24-26 April 2005.

⁷⁵ CEC, (2012) Commission Staff Working Document, Elements for a Common Strategic Framework 2014 to 2020, 14 March 2012

7. THE NORTH SEA REGION PROGRAMME IN CONTEXT

7.1 Introduction

In a review of the environmental context of the programme, this section considers the environmental performance of the INTERREG IVB North Sea Region Programme 2007-2013, the content of the INTERREG V North Sea Region Programme, and the significance of existing environmental strategies, programmes and policies as guiding instruments.

7.2 INTERREG IV North Sea Region Programme 2007-2013

The INTERREG IV North Sea Region Programme for 2007-13 has four Priorities:

- Priority 1, Building on our Capacity for Innovation, which has the objectives of encouraging
 the introduction and development of new and improved products and processes within the
 region's businesses and services, stimulating innovation within identified clusters and
 research and innovation networks, creating the right conditions for an innovation-oriented
 environment, and encouraging the adoption and use of ICT applications across the North Sea
 Region.
- Priority 2, Promoting the Sustainable Management of our Environment, which has the
 objectives of sustainable development of the coastal land and sea areas through integrated
 coastal zone management, developing preventative and response measures to address
 marine acute and chronic pollution, adapting to and reducing risks posed to society and
 nature by a changed climate, and promoting environmentally-responsible energy production
 practices.
- Priority 3, Improving the Accessibility of Places in the North Sea Region, with the objectives of
 promoting regional accessibility strategies, promoting the development of multi-modal and
 transnational transport corridors, and promoting the development of efficient and effective
 logistics solutions.
- Priority 4, Promoting Sustainable and Competitive Communities: Creating Attractive Places in Which to Live and Work, with the Specific Objectives of securing solutions to the needs of areas in decline to ensure that they contribute to the economic and social wealth of the North Sea Region, promoting and managing sustainable growth in expanding areas in order that they achieve their full economic and social potential, and implementing energy-efficient solutions for settlements.

With regard to the environmental performance of the NSRP 2007-2013, an appraisal can be drawn from the associated Strategic Environmental Assessment (2007) and the recent Strategic Orientation Report (2013).⁷⁶

The Strategic Environmental Assessment (SEA) of the NSRP 2007-13 concluded that sustainable development was emphasised in the general objective of the programme, as well as in two Specific

⁷⁶ ECORYS/COWI (2007) Ex ante Evaluation and SEA of INTERREG IVB North Sea Region Programme 2007-2013; INTERREG IVB North Sea Region Secretariat (2013) Strategic Orientation Report - Working paper for the next programme period, ISSN 1904-4704.

Objectives. Priority 2 was assessed as supporting SD through its explicit focus on environmental management, and Priority 4 inherently addressed sustainability. With regard to the environmental impact of projects, the SEA observed that the ex-ante stage made project-specific impacts difficult to predict. Nevertheless, a limited number of interventions related to process change were addressed in terms of relevant environment issues and criteria, with the conclusion that there was clear potential for process change through effective environmental integration, ultimately modifying the extent and direction of environmental impact. The SEA also described the project design phase as one where positive environmental inputs could reduce the impacts of existing activities and practices across the North Sea Region. Overall, however, detailed assessment of environmental impact would only be possible at a later stage subsequent to the programming process, and accordingly a downstream environmental screening mechanism was recommended by the evaluation team for use in the programme implementation phase. The SEA also proposed environmental indicators for monitoring the environmental performance of projects, based on the information presented in the initial applications.

With regard to the implementation phase, the Strategic Orientation Report summaries key activities within the projects under different themes. In terms of promoting the sustainable management of the environment (Priority 2), the activities fall into three main areas:

- First, in improving the transnational level of cooperation on sea-related issues, partnerships looked into new ways to collaborate on integrated coastal zone management and marine strategies at a North Sea level. The relevance of marine spatial planning for the region as an upcoming main European policy issue has also been addressed. Another main driver for transnational cooperation on sea issues has been technical feasibility testing to keep sea water clean by running joint pilots in the North Sea Region on ballast water.
- The second main area of activities concerned water issues including major challenges such as droughts and salt water intrusion into groundwater. Concepts for adapting to a rising sea level and flooding were also key focus elements for activities on transnational level. Partnerships developed risk management and adaptation plans and new collaboration and exchange systems and piloted and demonstrated new solutions by bringing in experiences from the different member countries with a potential for these solutions to be taken up around the North Sea. In relation to the Water Framework and Groundwater Directives, aspects of modelling and prediction tools were developed at different scales together with and for the regions around the North Sea. The partnership activities raised significant awareness about the transnational level of implementing the EU Flood Directive.
- The third main area of activities focused on low-carbon energy production and distribution around the North Sea. These activities were inspired by political debates about limited resources and the need for alternatives to fossil fuels. They have implications on a European as well as North Sea level, as the region is a key producer of energy, exploitation and production technologies and an important exporter of gas and oil.

In terms of improving the accessibility of places in the North Sea Region (Priority 3), most of the transport projects have expressed interest in linkages with energy issues, which has led to piloting and demonstrating new approaches for more environmentally-friendly ships and shipping by taking

ferry connections and port operations into account. Enabling airports to address some of their main environmental challenges was another effort in this direction.

Lastly, with regard to promoting sustainable and competitive communities (Priority 4), attention has been given to the challenges faced by the urban fringe and rural areas, and initiatives to improve services and environmental quality have included pilot actions considering how best to regenerate and redevelop derelict inner city land through planning and design. The potential for promoting energy efficiency has also been explored. Transnational activities have included the improvement of energy standards for building and construction activities and have allowed for expertise to be shared to determine, evaluate and implement solutions and responses for the North Sea Region.

These examples illustrate how projects have supported technological change, derived compatibility between economic growth and environmental improvements, and increased the number of new environmental business opportunities. In addition, most environmental projects have had close connections with on-going research projects within the 6th and 7th Framework Programmes as well as on-going national R&D/RTD projects. The innovative work being carried out is expected to have a substantial impact on regional, national and European policy as well as offering considerable potential for the implementation of green industry.

It is also worth noting that both the SURF and TIDE INTERREG IVB projects are highlighted in the Europeans Commission's study on Cohesion Policy and sustainable development in the context of an ecosystem and ecosystem services approach. Specifically, recognition was given to the SURF project's work, which focuses on improving the environment along the River Don. The partner aims to investigate opportunities for green tourism and to improve access for the local people by empowering local communities. The study highlighted the relevant environmental and economic benefits that could be attained as well as the value of developing tools that assist with the economic quantification of ecosystem services. Similarly, the inclusion of the work of the TIDE project illustrated the integration of an ecosystems services approach to planning in estuaries, which allows for the continued development of ports whilst preserving natural assets. It was noted that the TIDE approach will link ecosystem services to economic values by aiming to achieve a win-win situation.

7.3 North Sea Region Programme 2014-2020

For 2014-2020, the North Sea Region Programme has four thematic Priorities, which follow from and contribute to the programme strategy:

- Thinking Growth: Supporting growth in North Sea Region economies
- Eco-Innovation: Stimulating the green economy
- Sustainable North Sea Region: Protecting against climate change and preserving the environment
- Promoting Green Transport and Mobility.

⁷⁷ http://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/sustainable_development/sd_final_report.pdf

Nine Specific Objectives are associated with these four Priorities, as outlined in Table 14 to Table 17.

Table 14: NSRP Priority 1: Thinking Growth: Supporting growth in North Sea Region economies

Objective 1.1

Develop new or improved knowledge partnerships between businesses, knowledge institutions, public administrations and end-users with a view to long-term cooperation (post project) on developing specific products and services

Rationale: This objective targets the improved integration of research, innovation and education through establishing new networks and clusters for project and service development. Its aim is to establish a regular exchange of information leading to concrete joint development projects that ultimately lead to new or improved products and services for participating companies.

Objective 1.2

Enhance regional innovation support capacity so that it will allow regions to effectively increase innovation levels after the end of the funding period and particularly in line with smart specialisation strategies

Rationale: This objective seeks to ensure that all regions – regardless of location and capacity – are well-placed to develop their role in the knowledge economy and thereby deliver growth and jobs to the population. Rather than encouraging adoption of generic development models, its aim is to facilitate solutions that clearly differentiate each region and build development pathways based on existing assets.

Objective 1.3

Stimulate the public sector in generating innovation demand and innovative solutions for improving public service delivery

Rationale: Public sector actors can create demand for new and/or improved products and services and thereby 'pull' innovation, rather than relying on research to 'push' it with new inventions. This would encourage the development of more efficient and effective solutions for major challenges facing important areas of public service delivery such as public administration, healthcare, energy and the environment.

Table 15: NSRP Priority 2: Eco-Innovation: Stimulating the green economy

Objective 2.1

Promote the development and adoption of products, services and processes to accelerate greening of the North Sea Region economy

Rationale: Within the ecosystem approach, economic activities must move away from practices that will ultimately destroy the environments in which they operate. The programme aims to act as a catalyst for an industrial transition, supporting experimentation and transformative actions that will pilot a major shift in current patterns of production, consumption, working and living, redirecting activities in a more sustainable direction.

Objective 2.2

Stimulate the adoption of new products, services and processes that reduce the environmental footprint of regions around the North Sea

Rationale: Focusing on energy use and generation, new initiatives will help to reduce the regional environmental footprint. Local and regional-level action can contribute to energy savings and carbon emissions reductions, including greater use of renewables. Technological development, wider take-up of proven technologies, changes to working practices and/or behavioural changes will all be utilised to develop new solutions.

Table 16: NSRP Priority 3: Sustainable North Sea Region: Protecting against climate change and preserving the environment

Objective 3.1

Demonstrate new and/or improved methods for improving the climate resilience of target sites

Rationale: Climate change is a major threat that could impact on all aspects of affected ecosystems. Actions will be designed to address the negative impacts that have already occurred and prepare the North Sea Region for projected changes based on a further temperature rise of at least 1.5° C. Climate change adaptation actions will include – but extend far beyond – cooperation on flood defence.

Objective 3.2

Develop and/or implement new methods for the long-term sustainable management of North Sea ecosystems

Rationale: Sustainable management aims to ensure that human impacts do not exceed the sustainable limits of the North Sea Region's ecosystems, so that a natural balance can be maintained. This will include ways of reducing nitrogen and phosphorus overloads, pollution and biodiversity loss, as well as ensuring sustainable limits for resource extraction, freshwater use and land use.

Table 17: NSRP Priority 4: Promoting Green Transport and Mobility

Objective 4.1

Develop demonstrations of innovative and/or improved transport and logistics solutions with potential to move large volumes of freight away from long-distance road transportation

Rationale: Effective transport of goods is a condition for growth in all parts of the North Sea Region. A major step in reducing emissions would be to extensively expand multimodal services and limit the use of trucks to the first and last kilometres of any journey. Better integration of services is needed so that goods can move easily from door-to-door at a level of speed, cost and reliability that is competitive with road transport.

Objective 4.2

Stimulate the take-up and application of green transport solutions for goods and personal transport

Rationale: Local and regional freight transportation is dominated by trucks, and new solutions need to be found that can offer comparable levels of convenience at a much lower environmental cost. Similarly, passengers should continue to move from private cars to other means of transport, and this should be achieved through the integration of services and sustainable urban transport planning.

7.4 Relevant Environmental Strategies, Programmes and Policies

This section identifies key environmental initiatives that characterise and determine the operational context for the North Sea Region Programme. This contextual awareness also highlights significant aspects of these various strategies, programmes or policies with regard to the scope for environmental impact afforded to the NSRP.

Global initiatives

At global level, the major relevant initiatives are the United Nations Conference on Sustainable Development (Rio+20), which took place in Brazil in 2012, and the updated Kyoto Protocol.

Rio+20 marked the 20th anniversary of the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro and the 10th anniversary of the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg. Its objectives included securing renewed political commitment for sustainable development, and it resulted in a focused 'political outcome document' that contains practical measures for implementation. It also reaffirmed the need to achieve

sustainable development by promoting sustained, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems. The Conference also adopted guidelines on green economy policies, and launched a process to develop a set of Sustainable Development Goals (SDGs) that build upon the Millennium Development Goals and converge with the post-2015 development agenda.

The Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) is an international treaty that sets binding obligations on industrialised countries to reduce emissions of greenhouse gases. The UNFCCC is an environmental treaty with the goal of preventing degenerative anthropogenic impacts on the climate system. As part of the Kyoto Protocol, which entered into force in 2005, many developed countries have agreed to legally binding limitations/reductions in their emissions of greenhouse gases over two commitments periods. The first commitment period applied to emissions between 2008 and 2012, and the second commitment period applies to emissions between 2013 and 2020. In December 2012, an agreement was reached to extend the Protocol to 2020 and to set a date of 2015 for the development of a successor document to be implemented from 2020. In addition, the new concept of 'loss and damage' was introduced, an agreement in principle that richer nations could be financially responsible to other nations for their failure to reduce carbon emissions.

EU perspectives

Within the European Union, the documents with the greatest relevance are the Europe 2020 Strategy and the Seventh Environmental Action Programme. Sustainable development became a fundamental objective of the EU in 1997, when it was included in the Treaty of Amsterdam as an overarching objective. Subsequently, at the Gothenburg Summit in 2001, the first EU Sustainable Development Strategy (SDS) was launched. Whereas the Lisbon Strategy focused on employment, economic reform and social cohesion, the SDS added an environmental dimension and established a new approach to policy-making. In June 2006, the European Council adopted a renewed SDS.

Europe 2020

In 2010, a strategy for sustainable growth was launched – Europe 2020: A Strategy for smart, sustainable and inclusive growth⁷⁸ – which sets out a vision of Europe's social market economy for the 21st century. All future INTERREG programmes are expected to be in line with Europe 2020. Its priority of sustainable growth means promoting a more resource-efficient, greener and more competitive economy. Such an approach is anticipated to help the EU to prosper in a low-carbon, resource-constrained world, while preventing environmental degradation, biodiversity loss and unsustainable use of resources. It will also underpin economic, social and territorial cohesion.

Amongst its five objectives, which relate to employment, education, research and innovation, social inclusion and poverty reduction, and climate change/energy, the factors of greatest environmental relevance include limiting greenhouse gas emissions by 20 percent or even 30 percent compared to

⁷⁸ European Commission (2010) – Europe 2020: A Strategy for smart, sustainable and inclusive growth. COM(2010) 2020 final.

1990 levels, creating 20 percent of energy needs from renewable sources, and increasing energy efficiency by 20 percent (the "20/20/20" climate/energy targets). Each EU Member State has adopted its own targets in these areas.

In addition, specific areas of action have been addressed through seven flagship initiatives, three of which are especially environmentally relevant, as illustrated in Table 18.

Table 18: Europe 2020 Flagships

Resource-efficient Europe aims to decouple economic growth from the use of resources. It supports the shift towards a low-carbon economy, increased use of renewable energy resources, the development of green technologies and a modernised transport sector, and the promotion of energy efficiency. This flagship stresses the need for an urgent and significant transition towards using natural resources efficiently. This applies to producers and consumers in relevant areas such as energy, transport, climate, environment, agriculture, fisheries and regional policy.

An Industrial Policy for the Globalisation Era aims to improve the business environment, notably for SMEs, and it supports the development of a strong and sustainable industrial base able to innovate and compete globally. Its focus includes adjusting production processes and products to a low-carbon economy, realising opportunities within the green economy, supporting the transition to greater energy and resource efficiency, promoting technologies and production methods that reduce natural resource use, and increase investment in the EU's existing natural assets.

The *Innovation Union* flagship is also relevant, along with its associated financial instrument, Horizon 2020, turning innovative ideas into products and services that create growth and jobs. Its aim is to re-focus R&D and innovation policy on the challenges facing society, such as climate change, energy and resource efficiency, health and demographic change. A strategic research agenda will focus on challenges such as energy security, transport, climate change and resource efficiency, health and ageing, environmentally-friendly production methods and land management. It seeks to facilitate the key enabling technologies to shape Europe's industrial future.

The targets within Europe 2020 are interrelated: increased resource efficiency will improve competitiveness and foster job creation; and investing in cleaner, low-carbon technologies will help the environment, contribute to fighting climate change and create new business and employment opportunities.

EU Seventh Environmental Action Programme

The 7th Environmental Action Programme⁷⁹ sets out priority objectives to be attained (art. 192.3) in environmental policy in the context of the Europe 2020 Strategy. As part of the follow-up to the 2012 United Nations Conference on Sustainable Development described above, the new environmental action programme supports international and regional processes aiming to transform the global economy into an inclusive green economy in the context of sustainable development and poverty reduction.

Whereas many environmental challenges are global and can only be fully addressed through a comprehensive global approach, other environmental challenges have a strong regional dimension,

⁷⁹ European Commission (2012) Proposal for a DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet" COM(2012) 710 final.

which requires cooperation with neighbouring countries. The programme foresees significant scope for reducing greenhouse gas emissions and enhancing resource efficiency in the Union. This will ease pressures on the environment and bring increased competitiveness and new sources of growth and jobs through cost savings from improved efficiency, commercialisation of innovations and better management of resources over their whole life cycle.

While progress has been made in the EU to decouple growth from GHG emissions, resource use and environmental impacts, resource use is still largely unsustainable and inefficient, and waste is not yet properly managed. As a result, EU businesses are foregoing the significant opportunities that resource efficiency offers in terms of competitiveness, cost reductions, improved productivity and security of supply. Water quality and air pollution levels are still problematic in many parts of Europe, and EU citizens continue to be exposed to hazardous substances, potentially compromising their health and wellbeing. Unsustainable land use is consuming fertile soils, with impacts on food security and the achievement of biodiversity targets. Soil degradation continues largely unchecked. Addressing some of these complex issues requires tapping into the full potential of existing environmental technology and ensuring the continuous development and uptake by industry of the best available techniques and emerging innovations. Rapid advances in promising fields of science and technology are also needed.

Reflecting recent policy developments, the 7th programme is more strategic in nature than the 6th programme, re-clustering the previous four areas for action into three core thematic objectives:

- (i) to protect, conserve and enhance the EU's natural capital;
- (ii) to turn the EU into a resource-efficient and more competitive low-carbon economy; and
- (iii) to safeguard EU citizens from environment-related pressure and risks to health and wellbeing.

In providing an overarching framework for environmental policy to 2020, the new programme should build on the EU Biodiversity Strategy to 2020, the EU climate and energy package, the Roadmap for moving to a low-carbon economy in 2050, the Roadmap to a resource-efficient Europe, and the Innovation Union Flagship Initiative.

The programme has nine Priority Objectives, as outlined in Table 19.

Table 19: 7th Environmental Action Programme Priority Objectives

Examples of relevant features			
Examples of relevant features			
To protect, conserve and enhance the EU's natural capital	Halt the loss of biodiversity and ecosystem degradation, reduce impacts on fresh and coastal waters, reduce pressures on marine waters, protect soil and remediate contaminated sites, and improve the resilience of forests to climate change and fires.		
2: To turn the EU into a resource-efficient, green and competitive low carbon economy	Meet 2020 climate and energy targets, reduce the environmental impact of industry, increase resource efficiency, reduce waste generation, limit energy recovery to non-recyclable materials, eradicate landfilling of recyclable and compostable materials, and reduce or prevent water stress.		
3: To safeguard EU citizens from environment-related pressures and risks to health and wellbeing	Improve air quality, decrease noise pollution, assess and minimise environmental risks, make progress in adapting to climate change impacts, and integrate climate change adaptation and disaster risk management into policy initiatives and sectors.		
4: To maximise the benefits of EU environment legislation	Ensure that EU citizens have access to clear information showing how EU environmental law is being implemented, reinforce respect for EU environmental law at all administrative levels, and enhance trust and confidence in environmental law.		
5: To improve the evidence base for environment policy	Improve the basis for developing and implementing environment and climate polices, including measuring costs and benefits, improve the ability to evaluate and manage emerging environmental and climate risks, and strengthen the environment policy-science interface.		
6: To secure investment for environment and climate policy and get the prices right	Achieve environment and climate change policy objectives in a cost-effective way, supported by adequate finance, and increase private sector funding for environment and climate-related expenditure.		
7: To improve environmental integration and policy coherence	Integrate environmental and climate-related conditionalities and incentives in policy initiatives, and carry out systematic ex-ante assessments of environmental, social and economic impacts to ensure their coherence and effectiveness.		
8: To enhance the sustainability of EU cities	Implement policies for sustainable urban planning and design, define criteria to assess the environmental performance of cities, and ensure that cities have access to financing for measures to improve urban sustainability.		
9: To increase the EU's effectiveness in addressing regional and global environmental and climate challenges	Engage in relevant international, regional and bilateral processes in a strong, focused, united and coherent manner, and address challenges related to water, oceans, sustainable land and ecosystems, resource efficiency (particularly waste), sustainable energy and climate change.		

The Impact Assessment accompanying the programme acknowledges that greener, more efficient technologies, improved productivity and new employment opportunities will support growth and jobs; and a coherent and more integrated policy framework in support of resource efficiency and greener products will help also SMEs striving to become more resource-efficient by reducing their production costs and facilitating their access to new markets. Meanwhile, ensuring the resilience of our

ecosystems that support growth and protecting the health of citizens is essential to ensure the sustainability of economic advancement.⁸⁰

In a consultation, businesses stressed the need for innovation and resource efficiency while taking into account competitiveness concerns.

North Sea Region 2020

In 2011, the North Sea Commission published a North Sea Commission Strategy (NSR 2020) envisaged as a contribution to the Europe 2020 Strategy, which would more efficiently address common transnational challenges and exploit perceived opportunities. Priority areas in the NSC strategy, which are largely seen as interconnected, include managing maritime space, increasing accessibility and clean transport, tackling climate change, and maintaining attractive and sustainable communities, as well as a horizontal principle of promoting innovation, excellence and sustainability.

The NSR 2020 contributes especially to the Europe 2020 Flagship for a Resource-Efficient Europe. Specifically, in supporting sustainable growth, the NSR 2020 aims to reduce energy consumption, increase the use of renewable energies, modernise the transport sector by making it more environmentally friendly and more efficient, and promote green tourism.

Furthermore, it identifies energy and environmental challenges and risks, as well as opportunities in terms of transport, energy resources, environmental assets and innovation.

Arctic Strategy

Aware of the need for international cooperation on Arctic issues, the European Parliament approved a resolution on Arctic governance in 2008, and the Commission adopted its first communication on the Arctic in the same year, setting out EU interests and proposed actions around three main policy objectives:

- protecting and preserving the Arctic in unison with its population;
- promoting sustainable use of natural resources; and
- contributing to enhanced governance in the Arctic through implementation of relevant agreements, frameworks and arrangements, and their further development.⁸¹

More recently, in 2012 the Commission and the High Representative of the EU for Foreign Affairs and Security Policy published a joint communication highlighting areas where the EU is making a contribution to the protection and development of the Arctic. Specific environmental aspects include: fighting climate change; research on the Arctic environment that highlights the EU environmental footprint; and investing in sustainable development in the North to develop environmental potential. Proposals for further policy development include supporting research and channelling knowledge to

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⁸⁰ European Commission (2012) IMPACT ASSESSMENT *Accompanying the document* Proposal for a Decision of the European Parliament and of the Council on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet" SWD(2012) 397 final.

⁸¹ European Commission (2008) Communication from the Commission to the European Parliament and the Council, The European Union and the Arctic region, COM(2008) 763, 20 November.

address the challenges of environmental and climate changes in the Arctic, and ensuring that economic development in the Arctic is based on the sustainable use of resources and environmental expertise.⁸²

The Northern Dimension policy also encompasses Arctic issues and is looking to expand its involvement. Environment-related themes in the Northern Dimension that are complementary to the NSRP include partnerships in environmental protection, energy efficiency and the use of renewable energy.

8. ENVIRONMENTAL BASELINE AND TRENDS

8.1 Introduction

The purpose of this section is to provide environmental information that describes the current environmental conditions in the NSRP area, that supports the identification of environmental issues or problems, and that contributes to a baseline against which the programme's environmental effects can be assessed. This comprises both quantitative and qualitative data. It does not present an exhaustive list of every possible environmental parameter, but is selective in choosing topics considered relevant to the scope and potential influence of the programme.

Data and information have been gathered through a combination of desk-based research and direct consultation with a network of environmental contacts in each of the participating countries. The following organisations were involved in this interaction:

- Land-Use Consultants, Scotland;
- Environmental Protection Agency, Sweden;
- Ministry of the Environment, Denmark;
- Association for Housing, Urban and Spatial Development, Germany;
- Ministry of the Environment, Norway;
- Ministry of Infrastructure and the Environment, Netherlands;
- · Enterprise Flanders, Belgium;
- Environment Agency, England.

⁸² EC and High Representative of the European Union for Foreign Affairs and Security Policy (2012) Joint Communication to the European Parliament and the Council, Developing a European Union Policy towards the Arctic Region: progress since 2008 and next steps. SWD (2102) 182.

8.2 Regional Environmental Characteristics/Baseline Information

SCOTLAND

The programme area in Scotland includes Ramsar sites, Special Areas of Conservation, National Nature Reserves, Sites of Special Scientific Interest, Special Protection Areas and National Scenic Areas. Scotland's rich biodiversity is a major part of the country's identity, and many of its species and habitats are of international and European importance. A range of pressures have the potential to impact on Scotland's wildlife and biodiversity. Key issues include land-use pressures (i.e. loss or damage of natural habitats), nutrient deposition, exploitation of natural resources, pollution of air, water and land, increases in invasive non-native species, and the effects of climate change. Nevertheless, climate change may also favour certain species, potentially creating new opportunities for Scottish fisheries.

Agriculture remains the dominant land use in Scotland, covering 5.6 million hectares, equating to around 75 percent of the land area. However, agriculture is also a key source of diffuse pollutants, potentially impacting on the quality of rivers, lochs, coastal and transitional waters. Scottish soils are generally of good quality, and there is little evidence to suggest that serious soil erosion, compaction or other problems related to land management are occurring widely. Scotland contains a much higher proportion of organic soils than the rest of the UK.

Over half of Scotland's administrative territory is marine, for which the key pressures include climate change and acidification, source and diffuse pollution (particularly coastal and transitional waters), marine litter and invasive species. Work is currently ongoing to identify new Marine Protected Areas (MPA) in the seas around Scotland, which will protect important marine habitats and wildlife, geology and geomorphology, as well as features of cultural importance.

Trends in emissions in Scotland show that there was an overall decrease (-22.8 percent) in total greenhouse gas emissions from 1990 to 2010, but that between 2009 and 2010 there was an increase of 5.8 percent. The energy sector is one of the largest contributors to greenhouse gas emissions followed by transport, agriculture and related land use, and the domestic sector. With regard to reducing greenhouse gas emissions mitigation is required across a range of sectors and through changes in individual behaviour, including renewable energy generation, energy efficiency and changes in travel choices. The Scottish Government has the target of producing 100 percent of gross electricity and 11 percent of heat demand from renewable energy sources by 2020.

Scotland's water environment is in a good condition overall, but a wide range of problems exist at local levels. In terms of trends, environmental effects from industry are declining, whereas effects from urban development are increasing, in particular placing greater demands on urban drainage systems. Air quality in Scotland has improved considerably over the last few decades, though there are persistent issues with pollution from traffic and congestion in cities. In recent years concentrations of harmful pollutants in the atmosphere have fallen, achieved through tighter controls on pollutant emissions from industry, transport and domestic sources.

Flood risk is presented from numerous sources including pluvial, groundwater, rivers and coastal inundations. Flooding due to loss of floodplains from agriculture is manageable under current and new policies, but an increase in frequency and severity of flooding is likely as a result of climate change.

With regard to sea-level rises, the land surface in most of Scotland is rising due to post-glacial rebound, but this is not expected to be sufficiently rapid to negate sea-level rise, which is anticipated for almost the whole coastline, with the lowest levels of change on the Inner Clyde and sea lochs of Argyll, and the highest levels of change on Shetland, Orkney and the Western Isles.

Changes to landscape character in recent years is seen by some stakeholders as an important issue, principally resulting from a concentration of wind farms in certain areas, as well as continuing land abandonment. Changes in land use that can create direct or indirect pressures on biodiversity include energy generation, infrastructure enhancement, land and flood management, agricultural and forestry practices and expansion.

Future development is expected to prioritise sustainable locations for new development, seek to avoid flood risk, promote access to services, and provide good public transport links. Improvements to environmental quality should include providing good quality greenspace, remediation of derelict and vacant land and in relation to air quality avoid increases in or reliance on the private car. Climate change mitigation can also be supported through the development of renewable energy resources, reduced reliance on fossil fuels and wider support for the transition to a low-carbon economy.

SWEDEN

The overall goal of Swedish environmental policy is to provide the next generation with a country in which the major environmental problems have been solved, without increasing environmental and health problems outside Sweden's borders. This goal has been adopted by the country's parliament, along with 16 environmental quality objectives addressing themes such as clean air, a healthy living environment, and opportunities to enjoy nature.

Of the country's total land area of 45 million hectares, forest land is overwhelmingly the most common category, accounting for 53 percent, a share that has not changed significantly since 2000. However, the scope of agriculture has been changing over time, with a gradual reduction in the acreage of arable land, the greatest decline being in Norrland (and in southern Sweden's forested districts). There is also an abundance of lakes and watercourses, with about 96,000 lakes greater than one hectare in size and about 300,000 kilometres of brooks, streams and rivers. Traditionally, the economy has been dependent on natural resources such as forests and ore, which continue to be of major importance. Most people – almost 85 percent of the population - live in towns and cities, which are generally located along the coast.

The major challenges for the environment include limiting climate impacts, dealing with marine eutrophication and stopping the loss of biological diversity. By the 2080s, the mean temperature in Sweden is expected to rise by 3-5° C as a result of climate change. At the same time, precipitation will increase, particularly in winter, and there will be a considerably greater risk of flooding, landslides and avalanches. In terms of its contribution, Sweden's national emissions are low, whether calculated per person or per unit of GDP, compared with most other developed countries. These relatively low emissions are largely due to the use of hydroelectric and nuclear power in electricity production and a significant use of bio-fuels, as well as an active climate and energy policy.

Between 2011 and 2012, emissions of greenhouse gases in Sweden fell by 5 percent to reach 58.3 million tonnes carbon dioxide equivalents. This is the lowest figure since the base year of 1990. Overall, according to preliminary data, emissions have decreased 20 percent since 1990, which is equal to 14 million tonnes carbon dioxide equivalents. In sectoral terms, emissions from the energy sector (production of electricity and district heating, solid fuels and refineries) decreased by 5 percent between 2011 and 2012, whereas emissions from industry decreased by 8 percent over the same period. The latter decrease is primarily due to reductions in the iron and steel industry, the pulp and paper industry and the chemical industry due to the weak economy and declining export figures. Emissions from road transport decreased by 4 percent between 2011 and 2012 due to the fact that new cars are more fuel-efficient than older ones, as well as a higher proportion of bio-fuels and a reduction of the total amount of traffic on the roads in 2012.

With regard to the marine environment, over 6 percent of the territorial sea off Sweden's coasts and 3.5 percent of the exclusive economic zone are protected, and many marine areas are included in the Natura 2000 network. However, eutrophication, heavy fishing and the emission of pollutants have had a major impact on the seas. A large, efficient fishing fleet is a drain on a finite resource, and illicit cod fishing also takes place, estimated at 10 percent of reported Swedish catches. The vast majority of emissions come from other countries, such as the nitrogen emissions of the international shipping industry. Swedish emissions of phosphorus and nitrogen primarily come from sewage and industries, and diffuse leakage from arable land. A large proportion of nitrogen also comes from transport, combustion and animal husbandry. Although emissions of the eutrophying substances of nitrogen and phosphorus have declined, there is no noticeable change in the marine environment, and concentrations of persistent organic environmental pollutants in fatty fish are still higher than the threshold for the sale of fish for consumption that the EU has adopted.

Other environmental trends include reductions in the acidification of Swedish lakes, watercourses and forest land, which is a good example of the positive effects of international agreements and purposeful environmental initiatives. Although sulphur and nitrogen fallout has been reduced, acidifying fallout must decline further to reach a level that does not damage land and water.

With regard to biological diversity, Sweden has a long history of nature conservation, including being the first country in Europe to create national parks. Following the requirements of the EU habitat and species directives, Sweden's network of Natura 2000 areas is now almost complete. However, despite significantly increased initiatives, the loss of species, natural habitats and ecosystem services continues to increase. The intensive exploitation of the landscape has led to impacts on crucial environments, and it is difficult to reverse this trend. One example of this is farming land, parts of which are used increasingly intensively, while others become overgrown or are planted with forest. Nevertheless, there are also instances of nature conservation efforts having positive effects on biological diversity in lakes, watercourses and certain wetlands, measured by reductions in emissions of acidifying substances and the establishment of new wetlands.

DENMARK

Renewable energy has been high on the political agenda in Denmark for years, thus resulting in Denmark having a global role, especially concerning know-how regarding wind energy. Since the first

⁸³ Press release 4/18/2013.

oil crisis in 1973, Denmark has reoriented its supply of energy and developed its own production of energy in terms of its oil and natural gas resources in the Danish part of the North Sea and the production and development of renewable energy. Since 1990, total consumption of renewable energy in Denmark has almost quadrupled, with biomass and wind power being the two main contributors to the increase in the production

With regard to maritime strengths, Denmark is one of the world's leading maritime nations and Danish ship-owners and shipping companies are the fourth-largest operators of foreign gross tonnage worldwide. Danish maritime companies account for 24 percent of Denmark's total exports with a total production of more than €39 billion, corresponding to approximately 10 percent of overall production in Denmark.

Generally speaking, the Danish Government is exploiting the lead in eco-innovation through growth plans promoting innovation in energy- and resource-efficiency in areas such as water, bio-economy and environmental solutions, energy and climate, and agriculture and food.

In terms of the repercussions from climate change, Denmark is probably less exposed to impacts in comparison to other countries in Europe. However, in 2010 and 2011 Denmark experienced cloudbursts resulting in flooding of urban areas such as Copenhagen, Århus and several other cities, with damage in Copenhagen in the range of €800 million. Consequently, the Danish Government has passed a law with a budget of €0.4 billion addressing flooding problems through a programme of investments in sewerage, drainage and reservoirs to collect, contain and drain the vast amounts of water. Climate adaptation has been integrated into the spatial planning and water plans in the municipal water companies. Denmark is also vulnerable with regard to the growing demand for territory and land-use, since territory is a scarce resource, and agriculture, urban areas and infrastructure and other sectors make intensive use of the land, while Denmark is quite a small country.

At the end of 2013, the Danish Government published the Communication on national spatial planning policies. The main theme of the communication is 'Green change – new opportunities for all Denmark'. The Communication covers themes such as: Denmark in a Nordic and European context; green transformation, climate adaptation, resource efficiency and low carbon energy; cities on track towards sustainability; and rural areas in development and landscape and nature-management in the countryside.

Denmark has a strong tradition in sustainable urban planning, design and development. Much of the innovation and technology development addresses the needs of cities and is developed from a bottom-up perspective, e.g. in cooperation with NGOs, grassroots, volunteers and associations. Denmark has potential to improve its competitive edge through exporting innovative services and products that increase the sustainability of cities. In 2014, Copenhagen city will have the EU designation of environmental capital of Europe. Denmark shares the lead position on sustainable urban development with countries, regions and cities in the North Sea Region. Denmark should take advantage of and exploit its lead in eco-innovation and ensure continuity in terms of research and education in the green sector.

Competition is increasing from BRIC countries (Brazil, Russia, India and China), several of which are focusing their innovation projects on renewable energy, bio-economy and sustainable solutions for

cities. There is also a strong competition between key maritime nations and regions in order to attract and maintain maritime activities.

As Denmark is relatively densely populated and the countryside is intensively used, the natural resources, ecosystems and water-resources are continuously under stress. The main threats to biodiversity are similar to other Member States within the region, e.g. nutrients deposition, fragmentation of habitats, invasive alien species, disturbance of species and deterioration of habitats from on-going activities. Sharing the same objectives on favourable conservation status and the 2020 biodiversity target, the potential for projects and cooperation between Member States within the region on developing nature conservation is evident, e.g. on methods for nature restoration, management and interpretation, and monitoring and assessment of the effectiveness of measures taken.

The most obvious field for cooperation on biodiversity conservation is the Natura 2000 network. Denmark has designated 262 sites for a wide range of species and habitats, covering in all approximately 200,000 square kilometres, and approximately 85 percent of the surface in marine waters. The designation covers 8.3 percent of the land surface and 17 percent of the Danish marine waters.

The low land coverage of designated sites reflects land-use in Denmark. However, large areas of dune systems along the North Sea coast are unique. The large proportion at the sea reflects the importance of the surrounding marine waters for European biodiversity, e.g. for waterfowl, reefs and harbour porpoise. The Natura 2000 Network includes the entire Wadden Sea, designated by UNESCO as a World Heritage Site. The conservation of marine biodiversity is in general an obvious field for the development of regional solutions.

Natura 2000 sites cover core areas for biodiversity, and additional sites throughout the country contribute substantially to the conservation of biodiversity. Almost all natural habitats (grasslands, bogs, saltmarshes, lakes, streams, heathland), covering approximately 10 percent of the land surface, are generally protected.

Together with forests and small biotopes, these natural habitats have considerable potential - for example through restoration, linking and the creation of ecological stepping stones - for increasing, the ecological robustness and connectivity within and between Natura 2000 sites, which can also support the development of green infrastructure and eco-tourism, enhancing biodiversity and benefiting the quality of life for the region's population and creating self-sustainable management solutions.

GERMANY

The overall goals of the federal sustainability strategy are identified in the 'prospects for Germany' paper in 2002, in which the government presents a widespread strategy for sustainable growth, aiming at intergenerational justice, a high quality of life and social cohesion, as well as fulfilling Germany's international environmental responsibility. The greatest challenges are seen as the inclusion of every citizen and enabling self-reliant actions by every social group in the realisation of their responsibility.

The German part of the North Sea Region is embodied by the federal city states of Hamburg and Bremen and the area states of Lower Saxony and Schleswig Holstein. The two city states form important maritime transport hubs, but they are also distinctive in terms of their variety and abundance of species and natural areas of maritime and terrestrial regions (within which agriculture and agricultural animal farming form a major share of state economies).

The programme area in Germany includes marshland along the coast, heath, geest landscape, rivers and meadows, downs and lowlands. These features shape the natural and cultivated landscape that characterise the northern part of Germany, sometimes also referred to as the North German flatland. Hardly any other area in Germany has such diverse and largely intact nature. The North Sea is one of the richest and most biologically productive maritime areas in the world. Its richness in fish has been the basis of life and the coastal economy for hundreds of years. The sea-related economy, including tourism, and the maritime culture have become part of the history and heritage of the German North Sea coast region and are still cherished today. In addition, the terrestrial and the maritime region nowadays have a great variety of conservation areas that aim to preserve natural biodiversity, including bird sanctuaries, numerous biotopes, water protection areas as well as the Lower-Saxony, Schleswig-Holstein and Hamburg Wadden Sea, and the National Park reaching from the Netherlands to lower Denmark and forming the largest continuous tidal flats in the world. It is one of the last areas in Europe where nature can still develop to a great extent with little human influence. Together with the areas in the Netherlands, the German tidal flat was placed on the UNESCO World Heritage List in 2009.

The Natura 2000 network includes broad areas of land as well as the tidal flat all along the German coast (only excluding the river outfalls that are important as canals) covering 16 percent (862,000 hectares) of Lower Saxony, 10 percent (156,000 hectares) of Schleswig Holstein, 24 percent (20,000 hectares) of the state of Hamburg and 20 percent (8,500 hectares) of the state of Bremen (in each case including the maritime area within the 12-mile zone). In total, about 9.7 percent of the terrestrial area in Germany is protected by Natura 2000.

Nevertheless, a number of developments challenge the protection goals. Development pressure focusing on the growth of sustainable energy plants often causes direct competition in land and sea areas between protective and growth-oriented aims. In the maritime regions, this leads to a loss of protected areas of land and sea (bird and fish sanctuaries) and an increase in pollution. Another example is Germany's biotopes: according to a federal government report in 2006, 24 percent of biotope types are endangered, 35 percent have been classified as severely endangered, and 14 percent are at risk of complete destruction. The main conflicts derive from intensive agricultural use, particularly in areas with intensive emission of nutrients, and impacts on natural areas.

Another sustainability goal that the government set out in 2002 comprises 'prospects for Germany'. Referring to the high degree of new land consumption (77 hectares per day in 2010), the consumption-reduction goal was set at 30 hectares per day in 2020 and at zero percent in 2050. This is to be achieved through conversion of already occupied land or post-concentration of urban areas. Nevertheless, due to the high cost of conversion, the goal appears to have no prospect of success.

Many watercourses and water meadows have undergone changes as a result of impacts from shipping, technical flood protection, hydropower and agriculture. For example, 80 percent of all watercourses have been intensively transformed, 83 percent of all biotope types in rivers and

meadows are endangered, and only around 15-20 percent of natural water meadows have been preserved. Accordingly, the government aims to protect watercourses and their water meadows in their role as habitats, and the diversity of natural area in Germany is to be secured by 2020. Flooding has increased in recent decades, a factor that results also from an unnatural straightening of watercourses. By returning stream beds to their original shape and establishing new flooding areas, future floods, including those resulting from climate change, will be prevented.

Conflicts have occurred and will most likely increase in the German part of the North Sea Region with the construction and extension of industrial as well as cruise-ship ports, alongside the on-going need to deepen the river Elbe. Emissions, particularly from cruise vessels, have become a major problem in the port of Hamburg and impact on the inhabitants of the city.

Another means of reducing the impact of climate change is to significantly reduce CO₂ emissions. Goals were set in the Kyoto protocol, in accordance with which Germany had to reduce its emissions by 21 percent in 2008-12 on the basis of emissions in 1990. Trends show that there was a greenhouse gas emission decrease of almost 25 percent from 1990 to 2010, although an increase has been observed since then, the greatest being about 1.6 percent from 2011 to 2012. This resulted from the economic recovery and the very recent atomic turnaround in combination with low coal prices that currently favours the production of conventional, environmentally unfriendly energy. The energy sector is the largest producer of greenhouse gas emissions, which explains its substantial impact on total emissions. It is followed by transport, industry and private households.

By 2020, Germany aims to reduce the total emission of greenhouse gas by 40 percent compared to 1990. This will be achieved through massive support for renewable energy, which already has a share of 22 percent of total energy production and therefore fulfils the EU target of 14 percent by 2020. This mainly results from the German Renewable Act 2000, which is expected to be modified in future to cap the heavily increasing funds for renewable energy, particularly solar power. On the other hand, wind energy is now favoured instead of solar power, and therefore substantial investments will be necessary in future to provide the country with infrastructure, as the main part of wind energy will be obtained from offshore wind-parks. Establishing this energy infrastructure already challenges politics today and will be a major task in the future. Consequently, in addition to the new energy plants, the high-voltage wirings from the sea and across the southern shores have already become an area of conflict.

NORWAY

Whereas income from the Norwegian oil and gas industry has resulted in a considerable increase in living standards in the last 20 to 30 years, and it is the main reason for Norway's favourable economic position, oil and gas production has been the main cause of increased carbon dioxide emissions in Norway since 1990. Total greenhouse gas emissions increased by nearly 6 percent from 1990 to 2011, with emissions from the oil and gas industry increasing by 73 percent and emissions from road traffic increasing by nearly 30 percent. Emissions from manufacturing industries fell by almost 38 percent, and emissions from agriculture and landfills also decreased. Up to 2020, emissions from the oil and gas industry are expected to remain at about the current level, and then to decline towards 2030. However, emissions from the transport sector from manufacturing industries are expected to continue to grow.

Many changes caused by climate change have already been observed in the Norwegian natural environment, and major changes are expected to occur in future. Traditional recreational opportunities, such as skiing, may disappear in some areas. In some instances, climate change can reinforce the negative consequences of other pressures resulting in the destruction of habitat, the spreading of alien species, pollution and overuse of natural resources. As the climate warms up, indigenous species and ecosystems may be negatively affected, especially those that are already vulnerable and threatened. Large parts of the mountains will develop forest cover in the long run, and the growing season will be considerably longer. More frequent and intense precipitation can cause problems for agriculture and may cause erosion. In general, floods are expected to increase in extent, but with great local variations. Sea acidification is also likely to accelerate.

With regard to waste volumes generated by economic growth, in recent years more waste has been recovered and emissions from the waste sector have been reduced. Twenty years ago, it was common to landfill most of the waste in Norway. Since then, the proportion of the waste that is landfilled has decreased, while the proportion that is recovered has increased correspondingly. In 2011, approximately 87 percent of all waste was recovered. Material recovery and biological treatment account for 39 percent of the waste recovered, and about 30 percent is incinerated with energy recovery.

The Norwegian coastline, including the fjords and islands, is more than 57,000 kilometres long. About 80 percent of the population live in the coastal areas. The coastal zone and the coastal resources have played, and still play, a major role for settlement, employment and the national and regional economy. Significant activities in the coastal zone include fisheries, aquaculture, sea transport, tourism and recreation, and this spatial concentration creates a range of environmental pressures. In response, Norwegian land-use planning has developed Integrated Coastal Zone Management (ICZM), which promotes a holistic, collaborative and bottom-up approach involving all relevant stakeholders. The main objective is to ensure sustainable development of the coastal resources, both for the benefit of the coastal communities and for the nation as a whole.

Eutrophication in coastal waters and fjords in Norway is caused by discharges of nutrients particularly from fish farming, but also through runoff from agricultural areas and inputs from industry and municipal wastewater treatment. In addition, there is long-range transport of nutrients with ocean currents from more southerly parts of Europe. The latter process has particularly marked effects along the Skagerrak coast, but also influences the coastal waters of Western Norway. The input of nutrients to coastal waters are expected to rise with climate change, which will entail higher erosion rates and more leaching of nutrients from soil, because precipitation is expected to rise, especially in winter; and winter temperatures are expected to fluctuate more, resulting in repeated freezing and thawing of agricultural areas. Both of these factors are likely to increase the amounts of nutrients leached from soils and transported to coastal waters.

Norwegian coastal waters can be divided into four main areas: the Skagerrak, the North Sea, the Norwegian Sea and the Barents Sea, with different levels of nutrient inputs. Fish farming is the largest source of nutrient inputs to the North Sea, the Norwegian Sea and the Barents Sea. Discharges are highest in the Norwegian Sea, where fish farms account for almost half of Norway's total phosphorus releases. The absolute rise in inputs has also been highest in the Norwegian Sea, as phosphorus inputs have tripled since 1998. The situation in the Skagerrak is different, with agriculture and

municipal wastewater being the largest sources of nutrient inputs, and they have been fairly stable since 1990.

Norway's marine areas cover approximately 2 million km², including areas surrounding the Svalbard archipelago and the island of Jan Mayen. In addition to this, the Norwegian coastline is among the longest of any country in the world. The coastal waters are rich in flora and fauna, and the adjacent marine areas are some of the most productive in the world. The state of Norway's marine areas is generally good, but they are under growing pressure from human activities such as aquaculture, extensive fishing and oil and gas production. Climate change and ocean acidification are emerging threats, but so far little research has been done on the possible impacts of these changes. Norway has developed an integrated and ecosystem-based approach to the management of marine areas, addressing the Norwegian part of the Barents Sea/Lofoten area (presented in 2006 and updated in 2011), the Norwegian Sea (2009) and the Norwegian part of the North Sea/Skagerrak area (to be finalised in 2013). The development of marine strategies in EU member countries, in accordance with the EU Marine Strategy Framework Directive, provides excellent opportunities for cooperation.

Because Norway is a long and narrow country, it has extensive transport needs. The use of private cars has increased fivefold over the past 40 years. Journeys by public transport only accounted for 8 percent of the population's travels in 2005. Norwegians also fly more frequently and further, especially abroad. Emissions from journeys abroad are not included in the Norwegian emission inventory. Because of global warming, which results in more fairways, there is an increased risk of oil spills along the Norwegian coast.

NETHERLANDS

Despite continuing economic growth, environmental pressure in the Netherlands decreased significantly between 1990 and 2010, and the emission of many substances to air, water and land were halved during this period. At the same time, gross domestic product (GDP) increased by over 50 percent during the same period. In recent years, therefore, the Netherlands has succeeded in uncoupling economic growth from environmental pressure.

In relation to its Kyoto commitment, compared with 1990, there has been an increase in CO₂ emissions and a decrease in emissions of non-CO₂ greenhouse gases. However, the purchase of emission rights has contributed to the Netherlands achieving its Kyoto target, which is a reduction in greenhouse gas emissions of 6 percent, averaged over the 2008–2012 period, compared with 1990 levels. The Netherlands is also on track to achieve its 2020 target for greenhouse gases that do not fall under the European Emissions Trading System (EU ETS).

With regard to nature and biodiversity, the global target to reduce biodiversity loss has been achieved in the Netherlands. The expansion of nature areas and nature management has made it possible to halt biodiversity decline for many species groups. Recovery is even being seen in marsh areas, although biodiversity decline is still taking place in open dune areas and heathland. Outside the nature areas, however, biodiversity is still continuing to show strong decline. Overall, therefore, biodiversity loss in the Netherlands has slowed, but not stopped.

Considerable progress has been made in recent decades in various water policy areas and the Netherlands is now much better protected against flooding. Surface water quality has also increased

considerably, both chemically (nutrients, pesticides) and ecologically. There is sufficient fresh water available in normal and dry years for an adequate water supply to most users. Water drainage floods, swimming water and drinking water are also well managed. Nevertheless, serious policy tasks remain regarding water security, water quality, aquatic nature and future freshwater supply.

In terms of traffic and accessibility, investments in roads have limited the increase in travel time losses. The number of vehicle kilometres on the primary road network increased slowly but surely between 2001 and 2007, after which it levelled off at about 11 percent to 12 percent above the 2001 level. Concentration and compaction of residential and employment functions have contributed to the limited growth in mobility. However, the total loss in travel time on the primary road network in 2010 was over 25 percent higher than in 2001. There was a clear increase in travel time loss between 2002 and 2008, followed by a decrease (probably under the influence of the recession), after which it increased again slightly in 2010. There was also a slight decrease in average commuting distances over the last 10 years, because the number of jobs and the population in urban areas have grown more than in rural areas. Increasing proximity (for example of homes and work locations) is an effective way of improving accessibility.

In the *Energy Agreement for Sustainable Growth* of September 2013, more than 40 organisations have laid the basis for a robust, future-proof energy and climate policy enjoying broad support. They include central, regional and local government, employers' associations and unions, nature conservation and environmental organisations, and other civil-society organisations and financial institutions. The parties will pursue the Dutch Government's objective of generating 16 percent of the country's energy from renewables. The basic premise is a cost-effective rollout that provides certainty for investors, creates additional employment, triggers innovations that reduce costs, and contributes to boosting the competitiveness of Dutch companies in this sector. Combined with ambitious energy-saving measures, the parties hope that this approach will allow them to achieve the target of 16 percent renewables by 2023 and 14 percent by 2020.

Environmental pressures on nature prevent targets from being achieved. Problems with water stress and excessive use of fertiliser and plant protection products (in particular with respect to water) undermine the biodiversity of natural ecosystems. The decrease in environmental pressure has levelled off, but even if emission targets were achieved, this would still be insufficient to adequately protect nature. In the case of over-fertilisation, there is a lack of economically feasible solutions to the manure surplus problem. In the case of water stress, the main problems consist of insufficient land acquisition, a lack of local support, insufficient financial resources and a lack of administrative drive.

There are very few instances of the ecological quality of surface waters meeting the objectives of the Water Framework Directive. It is often impossible to achieve the water objectives and corresponding nature objectives, given the criteria that the measures required must not result in extra costs for agriculture. In large areas of the Netherlands, land-use is planned around agricultural use, which involves necessary unnatural drainage, unnatural water level management and unnatural flows, resulting in water stress in nature areas. In addition, as long as fertiliser levels remain too high, investments in land development measures will not be effective. In areas for which the objectives for water quality, nature and a healthy agriculture cannot be reconciled, a specific choice must be made at the spatial level between either agriculture or nature and water, in order to achieve the effective implementation of resources

The policy targets for safety and surface water quality have not been achieved. New policy is currently being drawn up and includes targets for 2027. In the short term, better prospects for water quality and safety could be achieved by improving compliance with obligatory emission reduction technologies, better matching the authorisation procedure to the practice setting, replacing the most polluting substances with those that are less polluting or with non-chemical alternatives, and by improving safety instructions for employees. For the longer term, the focus should be on investment in more systems innovation and the development of more environmentally friendly resources and methods, such as organic pesticides.

BELGIUM

Whereas the production index of industry in Flanders increased by 13 percent in the 2000-2007 period, environmentally friendly measures such as the use of less environmentally harmful fuels, end-of-pipe techniques and process improvements, meant that industry reduced its environmental pressure. However, in the 2008-2010 period, environmental pressure followed changes in industrial activity, which were influenced by the financial-economic crisis, indicating that environmental impact is not yet decoupled from industrial production. Consequently, the economic recovery in 2010 led to an increase in the environmental pressure in comparison with 2009.

In 2010, despite previous decreases in energy consumption, gross domestic energy consumption increased by more than 10 percent in Flanders. Due to the combination of the recovery of business activities after the financial-economic crisis and the exceptionally severe winter months in 2010, all sectors recorded increased energy consumption and increased greenhouse gas emissions, equalling the level of the period before 2006. The total net production of green power increased in 2010 by 21 percent with respect to 2009. Within domestic primary energy production, biomass made a contribution that was 16 times higher than the electricity generated from wind, water and sun.

Agriculture achieved a decrease in greenhouse gases of 8 percent in the 2000-2010 period, while Flanders overall registered a decrease of 2 percent. However, since 2008 greenhouse gas emissions increased by 5 percent. At 11 percent, agriculture is responsible for a larger share of the total greenhouse gas emissions than the economic size and energy consumption of the sector would suggest, due to the relatively high levels of nitrous oxide and methane emissions.

Transport activity increased in the 2000-2010 period, with passenger transport growing by 12 percent (passenger-kilometres) and freight transport by as much as 24 percent (tonne-kilometres). Passenger transport achieved an absolute decoupling between the emissions from passenger transport and the number of passenger-kilometres. However, although trucks are also becoming more energy-efficient, the greenhouse gas emission from freight transport was greater in 2010 than in 2000 due to an increase in activity. In 2010, the transport sector had a share of 11 percent in the total energy consumption of Flanders.

The total Natura 2000 area in Flanders comprises 166,187 hectares (12.3 percent of the Flemish territory). Between 2003 and 2010, the spatial coverage of nature areas with conservation management increased by 50 percent. The major part of this increase comprised officially recognised and funded nature reserves managed by non-governmental organisations and other nature reserves managed by the Agency of Nature and Forest.

For some habitat types, environmental pressures such as eutrophication and acidification are too strong to comply with the conservation goals of the Habitats Directive. For example, phosphorus concentrations in nutrient-poor brooks and rivers are often too high for aquatic habitats and species. As far as nitrogen-sensitive Natura 2000 habitat types such as forests, species-rich grasslands and heathland are concerned, current critical loads prevent restoration towards a favourable conservation status.

With regard to nature, 33 percent of the species in Flanders have a favourable conservation status and 37 percent a poor conservation status. Relatively speaking, the situation is worst for aquatic species, where only 10 percent score favourably. 25 percent of the species are on the Red List and are vulnerable to extinction if necessary measures are not taken. The decline of species is the result of the decreasing habitat area and its decline in quality. Three-quarters of habitats have a poor conservation status, all water-related habitats score poorly, and to most habitats are threatened by water and air pollution. Farmland birds in Flanders have been declining markedly during the last decade due to agricultural intensification and scale consolidation. For a small number of species, the conservation status is inadequate, and for more than one-third the status is bad.

An overall assessment of the 21 reported biodiversity indicators suggests that biodiversity loss in Flanders continued in 2011. It is important to tackle the various negative influences more thoroughly (such as detrimental land use, nitrogen, phosphorus and greenhouse gas emissions and the import and export of species). The Flemish Government has developed several instruments In order to protect and develop biodiversity in the countryside and to integrate this into modern management. Whereas schemes for field margin management and for the management of small landscape elements are very successful, agri-environmental schemes aimed at the development, conservation and restoration of specific farmland species and communities show varying success. The organically farmed area remained more or less stable between 2002 and 2010, accounting for 3.822 hectares in 2010.

Economic damage caused by flooding has increased in recent decades as a result of population growth and increasing prosperity. The floods in November 2010 caused substantial damage, and the subsequent evaluation revealed a need for a better application of the principle of holding back the water, storing it, and then discharging it slowly. Furthermore, there is a need for new flood areas to accommodate peak flows from watercourses. Additional buffer capacity is needed for large asphalted areas such as car parks, housing estates and regional roads.

Current policy scenarios predict a great leap forward as far as water quality is concerned, but the goals of the European Water Framework Directive to achieve 'good ecological status' in all natural surface waters by 2015 is hardly achievable even by 2027. This is also illustrated by the indicator 'defragmentation of rivers' in which, if the present trend continues, fish migration barriers on the priority network will only be removed after 2027.

In line with the general economies within the Flemish government, expenditure on the environment decreased in 2009 and 2010, but increased again in 2011, representing 4.5 percent of the total Flemish budget.

ENGLAND

For the United Kingdom as a whole, total greenhouse gas emissions in 2008 were 19.1 percent lower than in 1990. Carbon dioxide (CO₂) accounts for about 85 percent of the total UK greenhouse gas emissions, with average emissions per capita of CO₂ in the UK comprising between 6 and 12.5 tonnes; the programme area within the UK falls within this range. From a sectoral perspective, emissions from the industrial, commercial and domestic sectors and from road transport have declined consistently with the national trend.

Sea levels around the UK rose by 1mm/year during the 20th century, accelerating in the 1990-2000 period. In South East England, the sea level at Sheerness, Kent, rose by 250 millimetres between 1834 and 2006, while actual sea-level change (minus land-level change) around the Thames Estuary was between +0.9 to 1.2 mm per year. In terms of flood risk, almost 900,000 properties in South East England are at risk of one or more forms of flooding, whereas in the Anglian region (20 percent of which is within the flood plain), 400,000 properties are at risk as well as 30 percent of the most productive agricultural land.

With regard to energy, the UK Low Carbon Transition Plan was launched in 2009 together with the publication of the UK Renewable Energy Strategy and the UK Low Carbon Industry Strategy. In South East England, electricity generated from renewable sources in 2008 was equivalent to 9.4 percent of domestic sales and 6.5 percent of commercial and industrial sales. There has been an overall increase in electricity generated from renewable sources since 2003, despite a slight decline in 2007 and 2008. Nevertheless, renewable energy produced within the programme area makes only a small contribution to meeting total energy demand.

In terms of water resources, 21 percent of the surface water bodies in South East England are classified as of 'good ecological status' and 26 percent of the groundwater bodies have 'good status', whereas regions in Eastern England have only 18 percent of surface waters meeting the 2015 target of 'good ecological status'. In particular, substantial groundwater areas in Norfolk, Suffolk, Lincolnshire and Essex are classified as 'poor'. Pressures on this resource, which include discharges of pollutants, have generally decreased in recent years, but nevertheless, pollutants including phosphates, nitrates, metaldehyde, clopyralid and ammonia still threaten the safety of drinking water. Water over-abstraction is also an issue, especially with the additional pressures anticipated due to climate change. At present, 60 percent of Anglian surface freshwaters are either over-abstracted or over-licensed, and water is regarded as a scarce and often over-committed resource in the South East.

Air Quality Management Areas (AQMAs) have been set up in the UK where pollution levels exceed standards. In South East England, five AQMAs were declared in 2009, and 29 of the 52 local authorities in Anglian regions have declared AQMAs, with the majority targeting nitrogen dioxide, and in some cases also particulate matter.

English waste statistics mainly refer to municipal waste, which is waste collected by local authorities and mainly domestic in nature. Since 2007, England has recorded a year-on-year fall to reach 431 kilograms of household waste per person in 2011. In 2009, 47.9 million tonnes of waste were generated by businesses. The industrial sector accounted for 24.1 million tonnes and the commercial sector 23.8 million tonnes, of which 12.3 million tonnes were mixed waste and 11.6 million tonnes were non-metallic waste. Overall, 43 percent of household waste was recycled in 2011, representing

the highest recycling rate recorded for England. In 2011, for the first time, the amount of waste recycled, composted or reused outweighed the amount of landfilled waste.

9. STRATEGIC ENVIRONMENTAL ISSUES

9.1 Introduction

This section identifies environmental issues considered to have a strategic dimension in the context of the North Sea Region Programme. This refers to the scope for significant effects, which could be either positive or negative in character, requiring investment to prevent or mitigate negative impacts or to support and secure positive impacts.

The range of themes, which is drawn from the environmental baseline and trends described in the previous section, is categorised under four headings:

- Biodiversity/ecosystems
- Energy and resource efficiency
- Climate change
- Marine pressures

Examples of potential activities under each theme are drawn primarily from responses to the environment questions related to the Key Challenges in the NSRP Online Consultation Survey.⁸⁴

9.2 Biodiversity/Ecosystems

In a number of countries within the programme area, biodiversity continues to decline. In some cases, such as Denmark, even though major efforts have been initiated, water resources, natural resources and ecosystems continue to be under stress, because Denmark is relatively densely populated and the land is used intensively. In Sweden, where halting the loss of biological diversity is a major objective, and despite an extensive network of Natura 2000 sites, the loss of species, natural habitats, and ecosystem services is increasing. The factors behind these impacts include land-use pressures, exploitation of natural resources and the landscape, pollution of air, water and land, and the effects of climate change. In Scotland, agriculture is also a key source of diffuse pollutants, potentially impacting on the quality of rivers, lochs, coastal and transitional waters. The excessive use of fertiliser and plant protection products also undermines the biodiversity of natural ecosystems in the Netherlands, as agricultural practices involve necessary unnatural drainage, unnatural water level management and unnatural flows, resulting in water stress in nature areas. Investment in more systems innovation and the development of more environmentally friendly resources and methods, such as organic pesticides, has been highlighted as useful for longer-term consideration.

Action under this theme would be designed to reverse the decline in degraded ecosystem services such as water quantity and quality, soil and air quality, and halt the loss of biodiversity, delivering

⁸⁴ INTERREG IV North Sea Region Programme (2013) Environment – Results and findings of the Online Consultation Survey regarding the future North Sea Region Programme (2014-2020).

greater resource efficiency, for example following the milestones in the European Roadmap, which point towards a resource-efficient, green and competitive, low-carbon economy. Other features might include a wider body of reliable research data providing new information about the natural environment and allowing more informed planning and future decision-making.

Potential Activities

Examples of possible activities under this theme include:

- developing climate-neutral business parks/urban projects, not only taking into account energy management but also water management, biodiversity, green structures and waste management
- Assessing pathways, extent of pollution and environmental risks posed by litter (macro and micro) on the living resources and biodiversity of the North Sea ecosystem through transnational cooperation
- Transnational action to promote innovation to enable growth by removing impasses to development, such as biodiversity offsetting, and work to create settings for investment at the supra-regional scale.
- An ecosystem services approach, through which sustainable development is measured throughout the ecosystem not just by the advancement of technologies at certain points. For example, the Living North Sea project helps to quantify the area of lost habitat related to man's activities, using fish – which readily respond to habitat improvements – as indicators of environmental health.
- Promoting ecosystem services by strengthening the soil's capacity to absorb CO₂, by improving knowledge in this area, and by developing suitable agricultural methods of 'carbon farming'.
- Introducing the idea of green infrastructure as a holistic planning tool to help deal with ecosystems in the day-to-day planning process.

9.3 Energy and Resource Efficiency

The energy sector is one of the largest contributors to greenhouse gas emissions, and there is an evident need for increased renewable energy generation, effective promotion of energy efficiency and changes in travel choices. The share of energy generated from renewable sources (biomass, wind, sun and water) is increasing, with for example, the Netherlands' recent energy agreement pursuing a 16 percent target by 2023, combined with other energy-saving measures, while in Norway, emissions from the oil and gas industry are expected to remain at the current level up to 2020. A long-term vision for a low-carbon energy system should take into account the strategies of neighbouring countries and build on four elements of energy savings, wind at sea, carbon capture and storage (CCS) and innovative biomass technologies

Potential Activities

Examples of possible activities under this theme include:

- Reducing the carbon emissions of business parks through developing low-carbon business parks (energy planning, awareness raising for energy efficiency, use of renewables)
- Implementing energy efficiency and renewables for the existing housing stock through awareness raising with the owners, through training of businesses in low-carbon construction, involving colleges and universities to promote new techniques
- Developing localised carbon capture and utilisation, energy storage and waste-to-energy projects and infrastructure
- Promoting knowledge transfer to develop, design and manufacture materials, goods and services with embedded low-carbon technologies
- Supporting social innovation as cooperative solutions for energy production, including more cooperatives in wind energy, solar and bio-energy
- Building up learning factories for resource efficiency in each country in the North Sea Region, which could act as competence centres for energy and resource efficiency and could provide knowledge and lessons for companies to reduce energy consumption and carbon dioxide emissions. The Lower Saxony Learning Factory for Resource Efficiency (NiFaR) in Wolfenbüttel, Germany, could be a model for these learning factories.
- Exchanging best practice and support uptake between different regions of initiatives such as smart cities with low carbon transport, urban design/land use, energy efficiency, low carbon energy, smart meter/smart grid programmes, waste infrastructure development
- Including elements of social research in INTERREG projects that specifically address the human aspects of a low-carbon energy transition.

9.4 Climate Change

A range of impacts are anticipated in the programme area as a result of climate change. In Scotland, an increase in frequency and severity of flooding is likely as a result of climate change, and sea-level rise is anticipated for almost the whole coastline, with the highest levels of change on Shetland, Orkney and the Western Isles. In Sweden, is estimated to be considerably greater risk of flooding, landslides and avalanche; whereas in Norway major changes are expected to occur in future, as climate change reinforces the negative consequences of other pressures resulting in the destruction of habitat, the spreading of alien species, pollution and overuse of natural resources. More frequent and intense precipitation is also expected to cause problems for agriculture and may cause erosion. In general, floods are expected to increase, but with great local variations. Sea acidification is also likely to accelerate.

Potential Activities

Examples of possible activities under this theme include:

- Creating synergies, for instance by taking measures in order to adapt to climate change by developing 'building-with-nature' technologies that also promote biodiversity.
- Establishing a broad partnership across the region which includes industry, to further develop new technological approaches, including CCS
- Enhancing climate-modelling capacity, with an emphasis on investment in regional initiatives
- Exchanging and roll-out of mechanisms to raise awareness of climate risks to development, and opportunities for new adaptation goods and services with range of local players, including local authorities and stakeholders
- Exchanging and roll-out of how regions have identified how climate risks may affect the spectrum of business functions from sourcing materials, logistics and transport to productmanufacturing and service delivery
- Promoting and sharing case studies where businesses have taken advantage of the
 opportunities of climate change, e.g. build capacity in local businesses to deliver novel
 adaptation/resilience solutions to extreme weather, heat and drought; retro-fitting products to
 existing buildings and developments
- Preparing and delivering measures to identify locations and types of climate change resilience required to protect communities and industry. Assessment of landscape-based options for climate-change resilience. Managed retreat of coastal and riparian zones at risk from effects of climate change
- Facilitating cooperation and coordination among affected countries affected by flooding, because the adverse effects are often trans-boundary adverse effects, and this will increase resilience and reduce vulnerability.

9.5 Marine Pressures

For the marine environment in Scotland, the key pressures include climate change and acidification, source and diffuse pollution (particularly coastal and transitional waters), marine litter and invasive species. In the Swedish context, eutrophication, heavy fishing and the emission of pollutants have had a major impact on the seas, and although emissions of the eutrophying substances of nitrogen and phosphorus have declined, there has been no noticeable change in the marine environment

Similarly, in Norway, eutrophication in coastal waters and fjords is caused by discharges of nutrients particularly from fish farming, but also through runoff from agricultural areas and inputs from industry and municipal wastewater treatment. The input of nutrients to coastal waters is expected to rise with climate change, which will entail higher erosion rates and more leaching of nutrients from soil, because precipitation is expected to rise, especially in winter. Overall, Norway's marine areas are generally of good quality, but they are under growing pressure from human activities such as aquaculture, extensive fishing and oil and gas production. Climate change and ocean acidification also represent emerging threats. As a result of global warming, which in effect opens more fairways, there is also an increased risk of oil spills along the Norwegian coast.

Potential Activities

Examples of possible activities under this theme include:

- Restoring and safeguarding rivers, estuaries and coasts and securing improved ecological status
- Utilising integrated coastal zone management (ICZM) to cope with demands on the coastal
 area made by different economic sectors and the environment. New tools are being
 developed to facilitate decision-making, and their use around the North Sea may operate as a
 common language for planners and the exchange of ideas.
- Developing a toolkit/procedure/manual on how to achieve an improvement in the efficiency of ICZM in the North Sea region, accompanied by associated demonstration projects (e.g. exchange of resources/waste between companies-cities-inhabitants), illustrating how waste for one is a resource for the other
- Developing protection systems to handle the increasing pressure on ecosystems and water resources. Water quality and quantity must be improved, and landowners have to be aware that the input quality must be the same as the output.
- Developing strategies, policy and technical measures to prevent/reduce litter input to the North Sea and for clean-up operations through transnational cooperation

10. ENVIRONMENTAL ASSESSMENT

10.1 Introduction

At this stage in programme development, the exact locations, nature and impacts of actions cannot be identified, as this depends on specific projects that will support the delivery of the strategy. Accordingly, the approach of this report is to provide an indication of the range of potential impacts and suggest ways in which negative impacts can be minimised.

The methodology of environmental assessment divides the task into several components. Following a description of how environmental factors were considered in the programme's evolution, the Vision and Priorities are assessed for environmental conformity with the Europe 2020 Strategy and the EU Seventh Environmental Action Programme, with additional reference to other environmental initiatives. This extends into an appraisal of the programme Objectives within the Priorities, in each case reviewing a range of effects from potential positive impacts resulting in environmental gain through to potential negative outcomes requiring mitigation.

Thereafter, consideration is given to likely significant effects, the scope for mitigation measures, and corresponding indicators that would facilitate monitoring of environmental effectiveness.

10.2 Alternatives

As part of the programme-drafting process various initiatives supported the consideration of alternative perspectives from an environmental point of view, as follows.

The on-going evaluation of the 2017-13 programme included an online survey in which projects were asked to point out the opportunities and threats which they thought would most determine the development of the North Sea Region. In the list that emerged, some of the factors identified were in keeping with those in the programme's SWOT, but new or emerging trends that have become more important since the development of the INTERREG IVB programme were also visible. Examples included adapting to climate change and promoting sustainable transport, scarce resources for drinking water, economic and societal impact of flooding, and societal and economic impact of natural resources such as fisheries, minerals and energy. Nevertheless, it was acknowledged that these themes represented the views of a small group of project managers and not necessarily the broader partnership. These opportunities and threats were then compared against the 11 new thematic objectives as proposed by the European Commission.

The question of whether any of the new issues raised had a potential impact that is significant and widespread enough across the whole programme area to merit inclusion in a new SWOT was addressed at the second strategic meeting for the programme's internal stakeholders ('Billund 2'). During this event, workshops were held to discuss the status quo and the future relevance of the SWOT analysis, as published in the Operational Programme. The discussions were arranged in four workshops sessions, each of them focusing on one of the programme priorities. The three central questions were whether the SWOT analysis was still relevant, whether any new topics should be added to the thematic scope of the programme, and whether any topics in the SWOT analysis should

⁸⁵ The full list can be found in Annex 4 of the Strategic Orientation Report, 2013.

be prioritised in the future. Accordingly, the discussion encompassed the 2007-2013 programming period as well as perspectives for INTERREG V.

The previous SWOT analysis under Priority 2 was considered to be still relevant and not in need of change, and the topicality and importance of this environment priority was highlighted repeatedly. At the time, considering the fact that most of the funds had been allocated, consideration was given to reinforcing environment as a cross-cutting theme relevant for all priorities. Against the background of the financial crisis, there was a general concern that environmental issues might be neglected because of the associated financial costs. It was resolved that this threat should be turned into an opportunity by focusing on the environment as an economic factor – boosting the eco-efficient economy as a means to tackle the financial crisis. Topics discussed under Priority 1 and Priority 4 included climate change and eco-efficient solutions, which have recently become highly relevant, especially in the light of the financial crisis, and under Priority 3 new topics included eco-driving, environmentally friendly fuels and energy logistics.

During the Billund II event, there was a general consensus that the SWOT analysis of the programme was still relevant and formed a good starting point for the 2014-20 programming period. From an environmental standpoint, climate change and its impacts remained in focus, including the issues of flooding and resource shortages.

Other factors considered by the subsequent Strategic Orientation Report included that climate change remains very much on the agenda. There is greater vulnerability to rising sea levels and the storm tides of the North Sea Region could be significantly higher than today. The maritime environment is a central feature of the North Sea Region and it is under extensive pressure, with Kattegat and Skagerrak subject to widespread commercial and leisure uses. Amongst other things, they are criss-crossed by substantial maritime traffic corridors, are crossed by oil, gas, electricity and communications network infrastructures, are the centre of fishing and mineral extraction industries, and are the location of wind and wave power schemes. The risks of these activities producing damaging impacts on the coastlines and the marine eco-system are well known. It was acknowledged that actions to protect the functionalities of the coastlines – and response measures should those preventative measures not succeed – are an area of common transnational concern. Consequently, the programme seeks to support transnational cooperation efforts among the regions around the North Sea in developing effective preventive and response measures to tackle risks of climate change.

In another initiative, the authorities responsible for the North Sea Region Programme in Germany contracted the Institute of Urban Affairs to carry out a study on 'Transnational cooperation in the German North Sea Region'. The study considered the activities of the programme until autumn 2011 and focused on transnational cooperation and its added value and unique features, conditions after 2013, and the thematic future of the programme. The authors recommended continuing with the thematic priorities of the programme and listed a number of thematic topics to be considered for the future. Amongst others (and particularly from an environmental perspective), these included maritime policy and integrated coastal zone management, renewable energy and resource efficiency, and climate-proof urban and regional development. In order to take these topics into account, the study suggests continuing with successful approaches, such as regional energy concepts in the field of energy production and efficiency, and considering relevant EU policies for the environment.

⁸⁶ http://www.interreg-nordsee.de/ergebnisse_interreg_b.html

10.3 Appraisal of Programme Elements

Table 20: NSRP Programme Environmental Conformity and Potential Impact

PROGRAMME ELEMENT	CONFORMITY WITH EUROPE 2020 STRATEGY & 7 th ENVIRONMENTAL ACTION PROGRAMME (EAP)	POTENTIAL IMPACT ON STRATEGIC ENVIRONMENTAL ISSUES
Vision & Strategy		
The North Sea Region Programme 2014-2020 will allow the regions around the North Sea to join forces and work together on developing and testing more efficient and effective solutions to the main economic, environmental and transport challenges facing the region. The NSRP 2014-2020 is a programme for experimentation and innovation with a view to changing the NSR through the power of good examples. By evaluating impact through the extent to which non-partner organisations take up new methods, the programme aims to define a transnational agenda for future-proofing the programme area against the most important challenges awaiting the NSR.	Conforms with the Europe 2020 strategy for smart, sustainable and inclusive growth, facilitating a greener, resource-efficient and competitive economy, appropriate for a low-carbon scenario, and offering scope to prevent environmental degradation, biodiversity loss and the unsustainable use of resources. Links directly with Europe 2020 Flagship initiatives for Innovation Union, Resource-efficient Europe, and Industrial Policy for the Globalisation Era. Supports the 7 th Environmental Action Programme's pursuit of an inclusive green economy and the regional dimension of cooperation between neighbouring countries, including international, regional and bilateral processes that increase EU effectiveness in addressing regional and global environmental and climate challenges. Also contains scope to ease pressures on the environment while introducing increased competitiveness and new sources of growth and jobs through improved efficiency, commercialisation of innovation, and better management of resources.	The programme vision of facilitating the development and assessment of solutions for the main challenges facing the region allows wide scope for addressing the identified strategic environmental issues. Biodiversity/ecosystems could be supported through actions that address the loss of species and natural habitats, assisting recovery, while also promoting greater understanding of an ecosystem services approach, encouraging environmental management that operates within sustainable limits. Energy and resource efficiency could be attained through projects that support a green economy, realising opportunities for investment and employment-creation, for example in renewable energy, energy efficiency and low-carbon transport. Promoting business-resource efficiency can generate financial savings and competitive advantage for entrepreneurs, while reducing environmental impacts. Climate change could be addressed through pursuing a low-carbon economy, reducing the reliance on fossil fuels and avoiding the unsustainable use of natural resources, supporting the development of renewable energy resources and appropriate innovations through knowledge exchange and technology transfer. Marine pressures could be addressed through better management and by specific measures to reduce impacts on marine and coastal waters, lessening and preventing eutrophication by focusing on issues within industries and industrial practices, and through supporting transnational cooperation in coastal zone management and the development of effective integrated maritime spatial planning and strategies.

Priorities and associated Objectives		
Thinking Growth: Supporting growth in North Sea Region economies	Reflects the Innovation Union Flagship in efforts to refocus innovation and R&D on challenges facing society, including climate change, energy and resource efficiency, while turning innovative ideas into products and services that create growth and jobs. The Priority also reflects the Industrial Policy Flagship's support for the development of a strong and sustainable industrial base able to innovate and compete globally. Furthermore, Horizon 2020, the financial instrument for the Innovation Union Flagship, is intended to focus research efforts and deploy Europe's innovation potential by bringing together resources and knowledge across different fields and disciplines within the EU and internationally. Innovation with regard to resource efficiency was highlighted in the consultation for the 7 th Environmental Action Programme. Innovation to improve resource efficiency is required across the EU economy to improve competitiveness in the context of rising resource prices, scarcity and supply constraints. Although the business sector is the prime driver of innovation, government action at EU and Member State levels is essential to provide the right framework conditions for eco-innovation, stimulating the development of sustainable business or technological solutions to environmental challenges. Emphasis is to be placed on public and private research and innovation efforts required for rolling out innovative technologies, systems and business models that will speed up and lower the cost of transition to a low-carbon, resource-efficient economy.	Addresses the issues of: • Biodiversity/ecosystems • Energy and resource efficiency • Climate change • Marine pressures

1.1 Develop new or improved knowledge partnerships between businesses, knowledge institutions, public administrations and end-users with a view to long-term cooperation (post project) on developing specific products and services	Developing and improving knowledge partnerships has the potential to generate new networks and clusters that focus on projects and services with an environmental dimension. The objective highlights the aim of creating partnerships around a specific technology or need, such as regional potentials identified in smart specialisation strategies or similar documents, which could clearly focus on environmental issues. There may be transnational potential in the exchange of experience related to successful environmental techniques and exchange of specialist contacts between regions working on similar environmental challenges. It is important that partnerships should be based on a thorough understanding of the characteristics and assets of the region and its competitive advantages, and that they should engage a wide cross-section of regional stakeholders. In addition, projects oriented towards environmental products and services should reflect market-based needs and focus on deriving innovative solutions.
1.2 Enhance regional innovation support capacity so that it will allow regions to effectively increase innovation levels after the end of the funding period and particularly in line with smart specialisation strategies	The enhancement of regional innovation support capacity could be utilised to differentiate regions according to environmental sector specialisms, building on existing expertise and following a development path based on existing assets. Again, in some instances, this will be in line with potentials identified in smart specialisation strategies, where transnational cooperation can identify regions with complementary skills and assets with scope for modernising, diversifying and developing new economic activities through technological change and breakthrough innovations. This might include environmental specialisms in educational courses, linked to industry needs, support for startups in the environmental sector, development of environmental skills and a new sectoral expertise.
Stimulate the public sector in generating innovation demand and innovative solutions for improving public service delivery	New demand for improved public sector products or services could encourage the development of more efficient and effective solutions in the area of environment. Green procurement could be used to set demands related to the environmental performance of goods and services, and other aspects of procurement may offer opportunities to incorporate an environmental dimension.

2. Eco-Innovation: Stimulating the green economy

This Priority reflects the Europe 2020 drive for a more resource-efficient, greener economy, and specifically the Resource-efficient Europe Flagship's aim of decoupling economic growth from the use of resources. That Flagship also stresses the need for an urgent and significant transition to a low-carbon economy, increasing the utilisation of renewable energy sources and the promotion of energy efficiency. This Priority also mirrors Resource-efficient Europe's support for creating a circular economy in the EU, based on recycling, reducing waste generation, and using waste as a resource. In addition, the Industrial Policy Flagship supports the transition to greater energy and resource efficiency, promoting technologies and production methods that reduce natural resource use and increase investment in the EU's existing natural assets, whereas the Innovation Union Flagship facilitates a strategic agenda focused on challenges such as energy security. Within the 7th Environmental Action Programme, Priority Objective 2 addresses resource efficiency especially through meeting 2020 climate and energy targets, reducing the environmental impact of industry, reducing waste generation, and limiting energy recovery to nonrecyclable materials.

Addresses the issues of:

- Energy and resource efficiency
- Climate change

2.1 Promote the development and adoption of products, services and processes to accelerate greening of the North Sea Region economy	Steps to green the North Sea economy could encompass much greater use of renewable energy, energy-efficient buildings and improved land-use planning, potentially piloting a major shift in current patterns of production and consumption and utilising renewable natural materials. In pursuing regenerative circular economies, the majority of materials should be returned to the biosphere and products are designed so that non-natural materials can be reclaimed at the end of a product's lifetime. A factor supporting positive implementation is that this approach represents an extension of concepts that have already been successfully pioneered in North Sea Region businesses. Whereas no negative environmental impacts would be envisaged, care would need to be taken to ensure that this effort to boost competitiveness through the bio-economy utilises local, sustainable materials and that the resource base in each region is fully understood. The experimentation and transformative actions to consolidate the North Sea Region's leading position in the global greening market should fully comply with environmental regulation, and new greening initiatives should have clear potential for transferability.
2.2 Stimulate the adoption of new products, services and processes that reduce the environmental footprint of regions around the North Sea	This objective should support the energy transition, for example by encouraging projects related to increasing green energy supply and demand at local level, local energy storage and building local flexibility into energy systems. Action designed to provide low-cost, short-term ways of reducing energy use as well as retro-fitting existing building stock should directly assist in reducing carbon emissions. In addition, supporting new research for agriculture and forestry could make them more resource-efficient and resilient and reduce their carbon footprint. No direct negative impacts would be envisaged from new products, services and processes designed to reduce carbon emissions. Nevertheless, there is a general need to ensure long-term environmental conformity, so that projects addressing improvements in energy efficiency are based on realistic and sustainable renewable energy scenarios, preferably utilising low-energy building materials based on natural products from the programme area. In addition, some energy sources may bring other problems, such as wind farms and their association with aesthetic impact, operational noise and social unacceptability, and disturbance to habitats and biodiversity during construction.

3. Sustainable North Sea Region: Protecting against climate change

This Priority supports the Europe 2020 aim of securing sustainable recovery and sustainable growth, which recognises that climate challenges require immediate action and acknowledges the increasing global competition for natural resources and pressure on the environment. Accordingly, sustainable growth should prevent environmental degradation, biodiversity loss, and the unsustainable use of resources. Correspondingly, the Innovation Union flagship seeks to address climate change and land management, seeking to strengthen economies' resilience to climate risks and improve the capacity for disaster prevention and response. Innovative technology solutions are envisaged as potential catalysts in boosting competitiveness and returning the EU to its first mover position with respect to green solutions. In parallel, the Resource-Efficient Europe flagship supports a climateresilient economy by 2050, which will allow biodiversity targets to be achieved, as well as phasing out environmentally harmful substances. Within the 7th Environmental Action Programme, Priority Objective 1 seeks to protect, conserve and enhance the EU's natural capital, which includes ecosystems that provide essential goods and services, flood control, climate regulation and protection against natural disasters. Priority Objective 3 aims to safeguard EU citizens from environment-related pressures and risks to health and wellbeing, stating that dedicated action should be taken to ensure that the EU is adequately prepared to face the pressures and changes resulting from climate change. In addition, Priority Objective 6 aims to secure investment for environment and climate policy, and Priority Objective 9 seeks to increase EU effectiveness in addressing regional and global environmental and climate challenges.

Addresses the issues of:

- Biodiversity/ecosystems
- Marine pressures
- Climate change

3.1 Develop new and/or improved methods for improving the climate resilience of target sites	Developing methods for adapting to climate change impacts could address themes such as coastal flooding and erosion, freshwater shortages and salination, river and lake flooding (including in urban areas), pollutants and increased algal blooms due to temperature rises. This usefully draws on the evidence base gathered through the WaterCAP project, which applies knowledge and experience on water and climate change adaptation. Going beyond simple cooperation on flood defences, the benefits could extend to a range of sectors including agriculture, forestry, tourism, health, fisheries, energy and water provision. There is a need to ensure that actions are harmonised with national Adaptation Strategies, where these exist, and, to gain maximum benefit, projects should use green infrastructure and adopt an ecosystem-based approach, with selection processes particularly favouring transferable projects.
3.2 Develop and/or implement new methods for the long-term sustainable management of North Sea ecosystems	With its holistic approach to protecting and restoring ecosystems, this objective should combat biodiversity decline, addressing loss of species, habitats and ecosystem services, and maintaining impacts within sustainable limits. Special attention to the marine environment, acknowledging its central role as an ecosystem binding the NSR, has the potential to minimise conflict and maximise synergies. Offering expertise to others and developing commercial potential as a spin-off benefit should help to mainstream successful approaches. No direct negative environmental impact would be envisaged from developing new methods for long-term sustainable management. The most likely non-positive scenario would be missed opportunities to initiate significant improvements, losing the associated beneficial impacts in environmental protection and export potential.

4. Promoting Green Transport and Mobility	In the Europe 2020 decoupling of economic growth from the use of resources, Resource-efficient Europe supports the shift towards a low-carbon economy, including the development of green technologies and a modernised transport sector. In parallel, the Innovation Union flagship aims to address challenges facing society, with a strategic research agenda that includes the themes of transport and resource efficiency. Within the 7 th Environmental Action Programme, Priority Objective 8 seeks to enhance the sustainability of EU cities, including implementing policies for sustainable urban planning and generally improving urban sustainability, which accords with the sectoral transition envisaged for transport. In addition, Priority Objective 2 envisages a competitive low-carbon economy, highlighting how reducing greenhouse gas emissions and enhancing resource efficiency will ease pressures on the environment and bring increased competitiveness and new sources of growth and jobs through cost-savings from improved efficiency.	Addresses the issues of: • Energy and resource efficiency • Climate change • Marine pressures
4.1 Develop demonstrations of innovative and/or improved transport and logistics solutions with potential to move large volumes of freight away from long-distance road transportation		Reducing long-distance road transportation through expansion of multimodal services would directly contribute to reducing emissions, exploring potential for freight to make use of local trains, river transport, metro trains and trams, supported by intelligent transport systems to optimise load weights. ICT tools could be used to better manage urban logistics, assisting routing and consolidating shipments for longer journeys. Demonstrations of innovative solutions would need to be supported by training for transport and logistics managers, to ensure that they could construct effective transport chains using sustainable options. To encourage involvement, there is also a need to demonstrate the viability of the new services developed, both financially and environmentally.
4.2 Stimulate the take-up and application of green transport solutions for goods and personal transport		The environmental costs associated with local and regional freight transportation could be reduced through green transport solutions, especially with regard to CO ₂ emissions in urban areas. There is scope to explore new uses for vehicles such as flexi-bus services, combined-use passenger/freight vehicles, freight trams and car-sharing to reduce overall numbers and

maximise efficiency. In addition, sustainable urban passenger transport planning could integrate electrified rail services, trams and rapid transit systems, and improve conditions for buses, cycling and walking. This objective could also demonstrate the viability of transitional fuels with lower emissions footprints, such as LNG for shipping, potentially through maritime pilot projects, and second-generation biofuels for trucks, derived from waste rather than from food crops.

10.4 Significant Effects

In general terms, environmental outcomes would be significant in scenarios where the momentum of activity generates positive cumulative impacts or alternatively where activities may generate negative unforeseen or mismanaged environmental impact.

The appraisal performed in Table 20 illustrates that the programme demonstrates a clear compatibility with the objectives of the Europe 2020 Strategy and the Seventh EU Environmental Action Programme. The programme is also characterised by a high degree of environmental integration and targeting within the individual Priorities and Objectives. Nevertheless, there are inevitably uncertainties in terms of the form and significance of potential impacts and how effective the programme will be in securing positive outcomes.

With regard to **significant positive environmental effects**, in a scenario where programme implementation is very successful, the potential environmental benefits could be long-term and cumulative in nature, for example as projects designed to support a green economy realise opportunities for investment and employment-creation, in areas such as renewable energy and energy efficiency, reducing carbon emissions by furthering the transformation in the energy system away from fossil fuels. In addition to consolidating the region's leading position in the global market, this outcome offers scope for delivering benefits on some of the main environmental challenges in the region.

Furthermore, the adoption and mainstreaming of a holistic environmental management approach, which ensures that environmental impacts do not exceed sustainable limits for any aspect of the North Sea Region's ecosystem, would allow a natural balance to be maintained in the long term. Other potentially significant impacts could emerge from reorienting businesses towards a more sustainable direction and practices, opening up new growth opportunities, and involving a greater focus on using locally available resources. Such transformative actions could pilot a major shift in current patterns of production, consumption, working and living, aiming for regenerative circular economies where the majority of materials are returned to the biosphere and products are designed in such a way that non-natural materials can be reclaimed in high quality form at the end of product lifetimes.

Improving modal choice in transport also has scope for significant positive impact, supporting the transition of the NSR transport system to much less environmentally damaging practices. Removing large volumes of freight away from road transportation and optimising freight transport operations could reduce traffic volumes and have a downward impact on CO_2 emissions; and there is also scope for green transport solutions to impact on short-distance freight transport and personal travel, especially for urban areas which account for 40 percent of all CO_2 emissions and up to 70 percent of other pollutants from transport. Adoption of alternative fuels could also be environmentally important for the region, if the NSR takes a leading role in implementing new technologies, piloting the newest ideas or supporting the roll-out of proven technologies across the programme area.

Other positive effects may emerge from tackling climate change, as the programme supports the development or improvement of methods for adapting to potential and anticipated impacts, possibly addressing a number of themes in a wide range of industrial sectors. Lastly, bearing in mind that the

NSR already has world leaders in environmental technologies, there is potential for significant long-term impact especially in terms of commercialising innovative output if new niche sectors are created or identified, in which environmental techniques, technologies and other products are promoted and effectively marketed to generate sustainable new activity.

With regard to **significant negative environmental effects**, this would relate for example to a scenario in which programme implementation leads to unanticipated impacts, indirect effects or where projects are mismanaged or environmental conditions not fully observed.

Risks to human health are anticipated as minimal, particularly since the partner countries have robust systems of environmental control and planning, so that projects with environmental implications would be subjected to other filters before obtaining approval. The transboundary nature of the cooperation is also likely to produce a better understanding and exchange of experience with regard to environmental control.

Thereafter, potential negative effects may relate to themes such as energy, materials sourcing, regional knowledge and competitive activity. In the context of renewable energy, a critical factor may concern the form of energy supported and the construction of facilities. Wind farms have attracted considerable criticism in recent years for visual impact and operational noise, generating resistance to the establishment of new facilities and associated critiques of their real contribution to meeting energy demand. In the short term, the construction phase may undermine local biodiversity and habitats, whereas longer-term impacts may result in irreversible change and damage.

Sourcing materials in local and regional locations may offer benefits in terms of reducing transportation emissions as well as both financial and environmental costs, and these factors may be persuasive criteria if cited in project applications. However, if the practice differs from the original description, with materials and products drawn from external areas, there is a danger that the sustainability principles will be compromised and the vision of a regenerative circular economy will never be realised. To avoid this outcome, for example, project monitoring would need to include green accounting to identify the origin of source materials and their characteristics.

To develop a region's environmental strengths, a thorough knowledge is required of existing specialisms and expertise, as well as identifying potential themes for development, whether through clusters or individual support. However, there is a risk that familiar and/or popular themes will be favoured, following existing trends that may have been successful in the past, rather than creating a new development path that generates innovative environmental solutions. Consequently, the region's capacity to realise competitive advantage may be constrained if the fundamental baseline surveys are inadequate.

With regard to competitive activity, the path followed and adherence to ethical operational practices are important factors with long-term implications. In offering environmental solutions, businesses must be able to demonstrate that the practices and techniques utilised and ultimately exported fully comply with regulation. Examples of minimum compliance should not be followed, but instead projects should go beyond compliance in pursuit of environmental excellence. Environmental advantage should not be gained by means of cutting costs or by circumventing environmental legislation.

Potential negative factors require careful management and control, and they are addressed in relation to the individual programme components in the following section.

10.5 Mitigation

Although the Priorities and actions in the North Sea Region Programme have a wide potential to achieve positive environmental impact, there are a number of ways in which projects could produce negative impacts, as described to some extent in **Table 20**. This section draws further attention to these potential impacts and suggests ways in which significant adverse effects could be prevented, reduced or offset.

Priority 1: Thinking Growth: Supporting growth in North Sea Region economies

 Develop new or improved knowledge partnerships between businesses, knowledge institutions, public administrations and end-users with a view to long-term cooperation (post project) on developing specific products and services

In this theme, there is a need to ensure that knowledge partnerships obtain a thorough understanding of the characteristics and assets of the region and its potential competitive advantages. Within this scenario, the interpretation of 'competitive' should not be associated with cutting environmental costs, for example by delaying environmental obligations or seeking minimum compliance with environmental standards. The programme must convey a clear message that positive environmental impact is a key element of the programme's approach, and that competition should be based on high environmental standards. Similarly, innovation should be understood as including environment – and potentially prioritise environment – as a means of fulfilling the vision that the NSRP is pursuing.

• Enhance regional innovation support capacity so that it will allow regions to effectively increase innovation levels after the end of the funding period and particularly in line with smart specialisation strategies

Although no direct negative environmental impacts would be envisaged from enhancing regional innovation support capacity, programme implementation would need to ensure that the supported initiatives encompassed elements of environmental gain, so avoiding scenarios with missed opportunities to initiate environmental innovation, losing benefits in areas such as energy efficiency & resource use and improved environmental technology, ultimately slowing the transition to a low-carbon economy.

 Stimulate the public sector in generating innovation demand and innovative solutions for improving public service delivery

There is a need to ensure that public service delivery includes green procurement that sets demands related to the environmental performance of goods and services, as well as seeking out other aspects of procurement that may offer opportunities to incorporate an environmental dimension.

Priority 2: Eco-Innovation: Stimulating the green economy

• Promote the development and adoption of products, services and processes to accelerate greening of the North Sea Region economy

Care would need to be taken to ensure that this effort to boost competitiveness in this bio-economy utilises local sustainable materials and that the resource base in each region is fully explored and understood. The experimentation and transformative actions to consolidate the North Sea Region's leading position in the global greening market should not use shortcuts, and new approaches should have clear potential for transferability across the North Sea Region.

• Stimulate the adoption of new products, services and processes that reduce the environmental footprint of regions around the North Sea

There is a general need to ensure long-term environmental conformity, so that projects addressing improvements in energy efficiency are based on realistic and sustainable renewable energy scenarios, preferably utilising low-energy building materials based on natural products from within the programme area.

Priority 3: Sustainable North Sea Region: Protecting against climate change and preserving the environment

- Demonstrate new and/or improved methods for improving the climate resilience of target sites

 Need to ensure that actions are harmonised with national Adaptation Strategies, where these exist, and,
 to gain maximum benefit, projects should use green infrastructure and adopt an ecosystem-based
 approach. Selection processes should particularly favour transferable projects.
 - Develop and/or implement new methods for the long-term sustainable management of North Sea ecosystems

Need to ensure that agreement on management approaches is based on the same understandings, and that agreed thresholds are observed in practice. Participatory processes should also involve a sufficiently broad range of stakeholders to secure sustained support for measures.

Priority 4: Promoting Green Transport and Mobility

• Develop demonstrations of innovative and/or improved transport and logistics solutions with potential to move large volumes away from long-distance road transportation

Demonstrations of innovative solutions would need to be supported by training for transport and logistics managers, to ensure that they could construct effective transport chains using sustainable options. To encourage involvement, there is also a need to demonstrate the viability of the new services developed, both financially and environmentally.

• Stimulate the take-up and application of green transport solutions for goods and personal transport

Whereas there is considerable scope for positive impacts in the Objective, it is important to bear in mind that the programme cannot single-handedly fund a major transition in technology, but instead should concentrate on demonstrations and showing the way for widespread implementation.

10.6 Indicators for Monitoring Environmental Effectiveness

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

The following table provides examples of potential indicators that may be useful in monitoring different aspects of the programme performance, with suggestions for the division between the themes of the four Priorities.

Table 21: Potential Environmental Indicators

Thinking Growth: Supporting growth in North Sea Region economies	New networks and clusters with an environmental focus
	Projects aimed at developing regional environmental potential
	Exchange of experience and contacts related to environmental techniques and expertise
	Completed capacity-building and environmental knowledge-sharing initiatives
	Increase in environmental products and services available within the programme area
	Educational courses with an environmental dimension
	New start-ups and growth in the environmental sector
	Increased in environmental criteria applied in public sector procurement
	Adoption of green business models
	Utilisation of environmental management tools or methodologies
Eco-Innovation: Stimulating the green economy	New products, services and processes designed to reduce carbon emissions
	Increased demand and/or supply for green energy
	Increased use of renewable energy
	Incidence of local energy storage
	Initiatives to reduce energy consumption
	Initiatives to retrofit existing housing stock for greater energy efficiency
	Use of low-energy building materials
	Increased use of renewable natural materials from the programme area
	Evidence of eco-efficiency (enhanced resource

EPRC 139 University of Strathclyde

productivity, use of longer-lasting materials)

Sustainable North Sea Region: Protecting against climate change and preserving the environment	Initiatives to support North Sea ecosystem
	Changes (net loss/gain) in biodiversity and ecosystem services
	Overall reduction in carbon/greenhouse gas emissions
	Agriculture and forestry research projects focused on greater resource efficiency and reduced carbon footprint
	New methods for coping with climate change impacts (in various sectors)
	Uptake of new technology leading to improved resource efficiency and/or reduced climate change impact
Promoting Green Transport and Mobility	Reduction in volume of freight transferred by road
	Engagement of intelligent transport systems
	Training courses for transport and logistics managers
	Uptake of green transport initiatives
	Increase in low-carbon transport
	Overall reduction in carbon/greenhouse gas emissions
	Integration in urban passenger transport services
	Demonstrations of viability of multimodal services
	Use of fuels with lower emissions footprints (LNG and biofuels)
	Changes in condition of protected coastal and marine waters
	Incidence of coastal zone management initiatives

PART 6: CONCLUSIONS

11. CONCLUSIONS OF THE EX ANTE EVALUATION

The overall aim of the ex ante evaluation is to provide an external perspective on the preparation of the 2014-2020 NSRP with a view to strengthening its final quality and optimising the allocation of resources. The approach taken to the evaluation was iterative and interactive, with the evaluation team feeding into the Programme development process throughout. As such evaluation inputs have adapted to and taken into account the evolving content of the Programme. As has been noted in this report, ex ante recommendations, as well as the points of detail raised, mean the Programme has been tested and challenged, with key points debated and justified.

The content of the OP clearly takes into account evaluation papers, feedback and recommendations. The document is in line with key EU guidelines and requirements. The overall rationale and justification for the interventions proposed are sound and based on a strong evidence base. In the context of these general observations, it is now possible to make the following assessment of the key issues to be addressed by the ex ante evaluation.

 the contribution to the Union strategy for smart, sustainable and inclusive growth, having regard to the selected thematic objectives and priorities, taking into account national and regional needs;

The Programme has been built around the principles of smart, sustainable and inclusive growth set out in the Europe 2020 Strategy. Crucially, as part of this process the Programme assessed the needs of the Programme area, past experience, the policy environment, and stakeholder views. This assessment allowed the Programme to evaluate how the NSRP could best contribute to the Europe 2020 goals and benefit the region. The Programme narrowed its thematic focus in the course of the drafting process. However, the Programme was also aware of the need to appeal and remain relevant to stakeholders in the Programme area.

The thematic objectives and investment priorities selected by the Programme are well justified and relevant to needs in the Programme area. Related, the Programme's Priority Axes and Specific Objectives are well founded. Although the Programme's focus has narrowed as a result of the drafting process, the Programme's focus is still comparatively broad. This could affect the overall contribution of the Programme by spreading its resources thinly. However, it is also the case that through working across sectors, as well as regions, the Programme could develop new and innovative products, services and solutions benefitting the region and contributing to Europe 2020 goals. It is also noted by the evaluation team that within the Priority Axes targeted ideas on areas of intervention are conveyed.

 the internal coherence of the proposed programme or activity and its relation with other relevant instruments

The proposed interventions generally relate well to each other, working in complementary areas, but aiming to avoid significant overlaps. The central theme of 'transnationality' in the Programme, and the efforts to identify clear, specific areas to work within means that the interventions are distinct from

existing interventions and can add value. However, the Programme should also be aware of its scope to link and engage with other policy interventions, such as Horizon 2020.

• the consistency of the allocation of budgetary resources with the objectives of the programme

It is anticipated that the resources are in line with the needs identified, aims of the Programme and results targeted. The allocations also take into account past experience and likely demand, as indicated through partner consultation exercises. The 'weighting' of resources also reflects the Programme's strong emphasis on 'innovation' through in particular PA 1 and PA 2.

As well as the four thematic Priority Axes, the Programme has Priority Axis 5, technical assistance (TA). Negotiations on the extent of the TA budget have been, at times, challenging, linked to pressures to reduce costs where possible, but also the need to acknowledge the considerable administrative demands involved in managing and implementing a transnational cooperation programme.

A co-financing rate of 50 per cent for the four main Priority Axes was agreed early in the programme drafting process and was reviewed again prior to OP submission.

• the consistency of the selected thematic objectives, the priorities and corresponding objectives of the programmes with the Common Strategic Framework, the Partnership Agreement and the country-specific recommendations under Article 121(2) of the Treaty and the Council recommendations adopted under Article 148(4) of the Treaty

The NSRP's priorities are closely aligned to areas of activity for transnational programmes that are identified in the CSF. This alignment means that NSRP is able to distinguish the Programme from actions to be funded through other EU Funds and programmes, making the distinct role of the Programme in the region clearer, facilitating coordination and avoiding overlap. Further, by taking into account the priorities being discussed for national Partnership Agreements, areas of common interest were identified, which highlight the relevance of the NSRP, its alignment with national positions, and link to areas of specific interest for territorial cooperation activities. In addition throughout the drafting process, national representatives on the content group and PPSG noted areas of coherence/divergence with national agreements and programmes.

Although the challenges identified in the CSF and PAs are diverse, recurring themes are: support for research and innovation, adaptation to climate change and sustainable development, which all align with NSRF priorities. Such an understanding of the position of the NSRP relative to national Cohesion policy priorities was another step in ensuring a level of coherence and coordination between the Programme and its strategic policy context.

the relevance and clarity of the proposed programme indicators;

Setting result indicators was challenging. A number of factors meant that to establishing highly quantitative Programme level results indictors, baselines and targets using existing statistical sources

was not possible or useful, e.g. the scale of the Programme area; the types of area/activity where NSRP transnational territorial cooperation can best add value; and the issue of proportionality.

The Programme's more qualitative approach to setting and measuring Programme results addresses some of these challenges. As required, the Programme has one indicator per Specific Objective, which aims to capture the change intended, e.g. an increase in regional capacities. In establishing results indicators the Programme has kept a strong focus on the need to improve and build capacity in:

- Knowledge partnerships;
- Innovation support;
- · Green growth;
- Environmental quality; and
- Sustainable transport.

The clarity and ease of understanding of some of the terms used in the indicator frameworks could be questioned. To address this concern supporting 'definitions' have been developed. However looking forward, in order to maximise the 'use' and usefulness of the data, good communication with the institutions involved in gathering and using the data is crucial, and a clear understanding of these definitions will be essential.

The proposed output indicators were also developed in line with the Programme's overall focus and its Specific Objectives. The output indicators are generally easy to understand and interpretation/definitions have been provided where necessary. The output indicators are a step forward from simply measuring numbers of meetings etc. and increasingly focus on what the Projects, and Programme, expect to produce.

The Common Indicators available were considered in detail. A small number have some relevance to the types of activity planned by the Programme, for example indicator 1.1 'number of enterprises cooperating with assisted knowledge institutions'. However, even in these cases their direct relevance to the specific intervention logic of the Programme was limited, e.g. as has been mentioned, the ex ante evaluation team have questioned the use of 'number of enterprises cooperating with assisted knowledge institutions' as a main output indicator for priority 1.

how the expected outputs will contribute to results;

Capacity building is an area where the NSRP has scope to make a contribution at the Programme-level, through effective dissemination and application of outputs. It builds on, and develops, existing strengths and pushes towards changes that can be directly linked to the Programme. As such capacity building is also at the heart of the Programme's intervention logic, which takes into account development needs on the ground, the nature of the Programme, Programme resources, and scope to effect change. For each Priority Axis there is a recognised need to develop capacity in the areas targeted as a means to support economic growth, lead innovation, and promote sustainable inclusive development in the North Sea Region. For each Priority Axis it is also possible to identify ways in which the Programme can add value to existing policies and programmes through its interventions and deliver identifiable results.

It is also worth noting that as well as contributing to Programme-level results, the outputs will have direct benefits to a significant number of final and end beneficiaries who were directly involved in project activities. In taking a Programme-level view of results, it is hoped that the very considerable tangible, direct results for project participants and beneficiaries are not overlooked. While they may not extend across the Programme-level, they are valued and valuable elements of the Programme.

whether the quantified target values for indicators are realistic, having regard to the support from the CSF Funds envisaged;

Establishing appropriate, realistic yet ambitious milestones, targets and performance indicators was a challenging task. In a number of cases it has not been possible to set values for the selected indicators, for example for output indicators all baselines are set at zero. Baselines for the Programme's result indicators will be set following a dedicated review of conditions in the programme area. In both cases, the ex ante team are in agreement with the approach taken.

Where values and targets have been set the figures draw on past Programme experience and informed judgements about the likely character, scope, scale, and number of projects supported. On this basis the overall conclusion of the ex ante assessment is that overall:

- Milestones are realistic, based on reasonable assumptions about the budget and number of projects, and take into account the proposed spread of funding across the priorities and the results targeted,
- Output milestones reflect the Programme's commitment to developing new products, services and processes to develop capacity in key areas of North Sea Region strength and opportunity.
- The Programme has a good history of high disbursement rates and successful projects. On this basis, the Programme's financial milestones are considered to be achievable.
- Implementation milestones also take into account past experience in terms of the number of project applications and approval rates.
- Reliable data for the framework will be available in implementation reports and project progress reports.
- Baselines for result indicators and targets will be set according to a rigorous methodology. This
 methodology can be replicated to measure progress towards programme targets. It is anticipated
 that as part of the process of setting baseline values the issue of setting target values for results
 can also be addressed.

the rationale for the form of support proposed;

The form of support proposed is based on a sound analysis. The opportunities to use e.g. financial instruments, major projects and integrated territorial investment were assessed by the drafting team, evaluators, content group and PPSG. Based on a number of factors, including administrative complexity, the scale and scope of the Programme, and project types, the decision was taken not to pursue these options at this stage. This decision is also in line with the Programme's overall aim of simplification, a proliferation of different forms of support could be extremely complex for stakeholders to work with.

Consideration was also given to how to engage with the private sector in a way that benefits the Programme and programme area. As part of this, changes to the State Aid regulations have been considered in detail as they have become available.

• the adequacy of human resources and administrative capacity for management of the programme;

The Programme draws on the extremely strong human resource and administrative capacity of past NSRP programmes. There is considerable continuity in approach, carrying forward many institutional arrangements and systems from the 2007-2013 Programme. Where challenges have been experienced in the past, the Programme has taken, or is taking, action to make improvements, e.g. FLC arrangements.

The new demands of the 2014-2020 period were also taken into account and planned for. For example, it is anticipated that the emphasis on monitoring, and projects delivering clear outputs could place additional pressures on the secretariat. In addition, budget cuts in a number of Member States could lead to the secretariat taking on responsibilities in some areas. While this may not mean the allocation of additional formal tasks to the secretariat, the pressures involved in completing existing tasks could be greater, e.g. demand for information and dissemination activities higher, pressures of working with a new monitoring system.

• the suitability of the procedures for monitoring the programme and for collecting the data necessary to carry out evaluations;

Initially, the Programme set out to build on their existing on-line monitoring system. However, following an exploratory period and greater clarity on the demands of e-cohesion, the decision was taken to develop a new dedicated system which has strong links to the NSRP web-site and has the opportunity to transfer data and modify/change/up date forms as required. Thus, it is anticipated that a system tailored to the demands and needs of Programme bodies and project stakeholders will be developed in line with Commission requirements. Work on this element of Programme preparation is on-going.

In terms of data gathering, reporting procedures and forms are being developed. Crucially, as well as meeting the demands of Programme bodies and the European Commission, the aim is to develop systems that are in line with the overall goal of simplification, where possible, and the needs of project partners. The Programme is aiming to strike a careful balance between providing the volume of information required for monitoring and evaluation exercises, while not placing undue burdens on partners.

In the past, the Programme has undertaken a valuable on-going evaluation exercise. However, the evaluation reports were completed in the latter stages of the Programme and focussed strongly on more 'administrative issues'. A proposal from the evaluation team was that an earlier and more strategic evaluation reports could be useful in the future.

the suitability of the milestones selected for the performance framework;

The performance framework set out in the OP document:

- is based on an assessment of the likely progress of the Programme, its outputs and results;
- o covers relevant aspects of Programme implementation and progress;
- provides output milestones that focus on the core elements of the interventions, and the
 Programme, i.e. delivering new measures and solutions; and
- uses implementation milestones are in line with past experience.

However, on a note of caution: the outputs in terms of 'number of improved or new....' could be considered ambitious, given the number of anticipated successful applications.

• the adequacy of planned measures to promote equal opportunities between men and women and to prevent discrimination;

The Programme rightly recognises that the horizontal principles are inherent in its overall vision. Based around key development opportunities and challenges, the Programme draws the horizontal themes throughout by identifying relevant development challenges and highlighting how the Programme's Priority Axes and Specific Objectives address these issues.

Thus, the available text in the draft OP covers relevant issues and notes ways in which both the Programme and projects can respond. It is recognised that the programme area covers some of the most developed countries in terms of promoting equal opportunities and non-discrimination. By noting this and setting the Programme in this context, the Programme's approach is further strengthened, e.g. in the case of equal opportunities and the proposal to adhere to national regulations.

Previous feedback from the ex ante evaluators noted that throughout the OP text on this issue a more 'process' based account of how the horizontal themes are integrated in the Programme could be provided, e.g. noting developments in the programming process, aspects of programme content, relevant priorities and actions to ensure compliance throughout the lifetime of the Programme, including project requirements.

• the adequacy of planned measures to promote sustainable development.

Sustainable development lies at the heart of the NSRP's approach to economic growth. Throughout the Programme there is a strong recognition of the need to balance the carrying capacity of natural systems with the social and economic challenges faced by the region. For example, the economic development opportunities in promoting green-technologies and renewable energy are noted. The Programme makes a commitment to pursue sustainable development both by ensuring compliance with relevant national environmental legislation and by integrating sustainable approaches into the priorities of the Programme. The Programme sets out plans for a wide range of interventions that are in line with sustainable development objectives. Related, plans and requirements are set out for how projects should address the issue.

• measures planned to reduce the administrative burden on beneficiaries.

Informing systems and approaches for the 2014-2020 Programme are demands for simplification and harmonisation. The NSRP has had effective and efficient systems in place for the 2007-13 period and can build on this expertise. Looking to the 2014-2020 period, simplification and opportunities for harmonisation have been considered throughout. Specific measures introduced include:

- A two-step application process;
- Considered use of HIT tools, simplify formats for collecting information from beneficiaries.
- Efforts in terms of data collection requirements. While acknowledging the demands from users such as auditors, limit the required data to what is useful and necessary;
- The Programme will introduce simpler, harmonised eligibility rules, e.g. with five standard budget lines and flat rate overheads.
- E-Cohesion The Programme is already well advanced in this area. The aim for the 2014-2020 period is to save time and reduce costs and errors.
- Clear targeted training to all beneficiaries on key issues.
- Development of clear, consistent rules and guidance, especially on payment and control.

However, it is recognised that in transnational territorial cooperation programmes many tasks remain complex and challenging, where this is the case additional support, information and explanation can be provided.

• Strategic Environmental Assessment

The SEA Report considered that the Programme's Vision and Priorities conform with the Europe 2020 Strategy and the EU Seventh Environmental Action Programme. The environmental assessment demonstrated a clear compatibility between the EU policies and the NSR programming document, with considerable scope to further develop these themes during programme implementation.

Although cautioning against possible negative impacts and advising on mitigation measures, the SEA Report identified great potential for positive environmental impacts from the Programme. The Objectives were appraised as well-placed to address the strategic environmental issues, deriving benefits that could be long-term and cumulative in nature. For example, projects designed to support a green economy can realise opportunities for investment and employment-creation in areas such as renewable energy and energy efficiency, reducing carbon emissions and furthering the transformation in the energy system away from fossil fuels; and the adoption and mainstreaming of a holistic environmental management approach, which ensures that environmental impacts do not exceed sustainable limits for any aspect of the North Sea Region's ecosystem, could allow a natural balance to be maintained in the long term. Other potentially significant impacts could emerge from reorienting businesses towards a more sustainable direction and practices, opening up new growth opportunities and involving a greater focus on using locally available resources. Improving modal choice in transport also has scope for significant positive impact, supporting the transition of the NSR transport system to much less environmentally damaging practices. Lastly, with regard to environmental technologies, there is potential for significant long-term impact especially in terms of commercialising innovative output if new niche sectors are

created or identified, in which environmental techniques, technologies and other products are promoted and effectively marketed to generate sustainable new activity.

12. ANNEX

Annex 1: Thematic Objectives and the NSRP

Territorial cooperation objectives	NSRP 2007-13	Opportunities and Threats	Partner views	Policy alignment ⁸⁷
1. Strengthening research, technological development and innovation	New priority for the 2007-13 Programme Highly successful part of the Programme Funded Projects with tangible results Also, funded more 'networking'/traini ng-type projects	Renewable energy Energy efficiency Sustainable shipping Growth sectors creative industry, social economy and green economy Marine innovation	Broad agreement that this should be a key pillar of the whole programme Good take up in current programme Important for economic development in NSRP regions and closely related to SMEs Some interest in sectoral emphasis on priority axes Should cover the full range of 'innovation' should not just be a support for University research. Should not take the form of 'normal' business support Crucial to identify own niche as many other programme's also include innovation theme Help establish transnational complimentary innovation systems Difficult to achieve tangible results in the form of products and services Possibility to support a broad range of themes (energy, supply chain, creative industry, health etc). Strong regional dimension Possibility to focus on social innovation	Strong links to domestic, EU policies, macroregional, and regional strategies Overlaps/comple ments numerous INTERREG A programmes in the NSRP region (nine in total) Innovation recognised as central to growth in policy

EPRC 152 University of Strathclyde

⁸⁷ No reference made to Europe 2020 and CSF, as the territorial objectives listed are at based on these documents.

2. Enhancing access to and use and quality of information and communication technologies	Addressed through Intervention 1.4 of the 2007-13 NSRP Involvement from public sector eservices ICT underpins projects across all four NSRP 2007-13 priorities (e.g.	 Delivery of ICT services Technology development Urbanisation Impact of the 2008 recession and ongoing financial 	Broad agreement that this should not be a key pillar. Development new ICT services, apps and E-government is important (can be addressed under other priorities). This priority is too narrow	Links to some national development policies (e.g. Norway, Denmark) though others place less emphasis on ICT (e.g. the Netherlands) Prominent in
3. Enhancing the competitiveness of small and medium-sized enterprises	Already has a strong focus through Priority 1 of the current NSRP Private sector engagement has been a strength NSRP acts as a mediator in many cases, connecting disparate actors (public, private, universities)	 Urbanisation Tourism (European and international) Trade links to BRIC economies Impact of the 2008 recession and ongoing financial crisis (threat) 	Supported from some partner countries Difficulty for INTERREG programmes to truly engage with SMEs Can be covered in other priorities (innovation and env) Should focus on improving partnerships and skills development Important for growth Could be included as a horizontal theme	SMEs are the focus of numerous regional economic development interventions (e.g. Denmark, Scotland) SMEs a focus for regional operational programmes and also likely focus on other INTERREG programmes (e.g. OP 'Belgium –
4. Supporting the shift towards a low-carbon economy in all sectors;	Largely addressed through Interventions 2.4 and 4.3 in particular. Several others also have overlap to varying degrees (e.g. under Priority 3 – Food Port, Care North) Projects have tended to focus on feasibility/strategy assessment, and/or the energy sector (i.e. energy production)	 Growth of the green economy (as a sector) Sustainable shipping Green energy Favourable political agenda Unsustainable transport (hydrocarbon-based) (threat) 	Broad agreement that this could be a key pillar. Important to focus on clean technology Lack of a reference to transport is problematic Focus on maritime renewables (wind, water and wave) Allows for a long term perspective	Wide range of support measures available Low-carbon transition is a multiaspect policy area which includes energy production and consumption Links will with EU (e.g. 2050 Roadmap) and domestic policy goals Activities in this field demand joint solutions to shared
5. Promoting climate change adaptation, risk prevention and management;	Strong focus in NSRP 2007-13 through Priorities 2 and 3 Relative Priority 2 concentration of projects on coastal and freshwater environments, and agriculture	 Low-carbon transition opportunities (e.g. energy efficiency) Costs of transition (threat) Existing and on-going impacts of climate change (threat) 	Broad support from partner countries but some room for discussion (theme 5 or 6) N. Sea Region is already advanced in this area Specific issue of flooding and coastal regions mentioned	Emphasis on eco- innovation Diversified economies Particular relevance to coastal areas (e.g. the Netherlands) at risk rising sea levels

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6. Protecting the environment and promoting resource efficiency	Presently covered through Priorities 2 and 4. Resource efficiency in logistics also in 3.3 Environmental protection challenged due to intensification of North Sea use Projects often focus on public	Green energy Marine resources and sustainable maritime activities Impact of the 2008 recession and ongoing financial crisis (threat)	Broad support from partner countries but some room for discussion (theme 5 or 6) the North Sea as the connective element and sustainable resource for the surrounding regions possibility to fit heritage projects Maritime pollution is a common threat Risk of saturation: a high number of other funding sources will support this theme.	Sustainable development at the heart of domestic and EU policies Innovation closely tied to resource efficiency through clean technology (e.g. Scotland, Denmark, the Netherlands)
7. Promoting sustainable transport and removing bottlenecks in key network infrastructures;	Some coverage through current NSRP (Interventions 3.1 and 3.2) Projects are generally complementary to infrastructure development and include feasibility studies, strategy development and/or awareness raising	Marine resources and sustainable maritime activities Sustainable shipping Limited budget for infrastructure Unsustainable transport (hydrocarbon-based) (threat)	Receives strong support from some partner countries Largely of a strategic nature (lack of funding for infrastructure) Some partner countries consider the projects in the current accessibility theme to be highly valuable whereas others do not Relate to issues such as: maritime transport including shipping, intermodal transportation, development of small ports, safety issues, environmental issues and coastal zone management Easier to create tangible outputs Programme has a 'niche' in transport projects. Important for peripheral areas in the Programme (connect to High North)	Sustainable transport and mobility particularly important for 1) trade and 2) peripheral regions Relevance of new transport links, including Arctic shipping routes Linkage with TEN-T A major factor in improving/developin g local communities
8. Promoting employment and supporting labour mobility;	Marginal overlap through Priorities 1, 3 and 4 Improved employment is often an end result of projects with alternative foci (e.g. broadband infrastructure, skills training) Labour mobility key issue in	 Urbanisation Innovation in public service delivery Out-migration (threat) Youth unemployment (threat) Demographic change (threat) 	Broad agreement that this should not be a key pillar More relevant to INTERREG A programmes However, the Programme should be aware of its capacity to create jobs where relevant	Skills supply and improved workforce supply Promotion of employment opportunities Generally pursued through 'soft' intervention measures in domestic policy (skills training, education social

9. Promoting social inclusion and combating poverty;	Limited overlap in current NSRP (Intervention 4.1) Projects tend to focus on identifying new opportunities for NSRP regions affected by social issues / poverty.	Innovation in public service delivery Urbanisation Impact of the 2008 recession and ongoing financial crisis (threat) Intolerance of minorities (linked to the above) (threat)	Supported by some partner countries Possibility to include sustainable communities High risk of projects that lack a transnational dimension Closer related to national Structural Funds Important in peripheral/ rural areas	Promoting welfare of the population, well-being, health, education, and welfare receive considerable attention in NSRP partner's regional and economic development plans 'Equal living conditions' is an
10. Investing in education, skills and lifelong learning;	Relatively limited overlap through Priorities 1 and 3 Skills development is a common theme in projects (e.g. SKINT, CCC) Education or skills training often linked to a thematic focus such as	Promotion of the Bologna process Innovation in public service delivery Labour market weaknesses (shortage of labour and therefore takeup of opportunities) (threat)	Broad agreement that this should not be a key pillar. Some potential overlap with skills development of SMEs (in innovation) Closely related to national Structural Funds Education and training could be part of projects, but not a focus for the Programme.	Skills supply and improved workforce supply Wider access to education, learning in later life labour up-skilling Overlaps with the EU's Lifelong Learning Programme
11. Enhancing institutional capacity and an efficient public administration.	Addressed to an extent through Priorities 1 and 3. Intervention 1.3 is highly relevant in the context of innovation Strong public sector focus, but some projects (e.g. CCC) rely on private sector cooperation Public efficiency in transport and accessibility dependent on business engagement (e.g. logistics firms)	Transnational cooperation as a means of building regional linkages and strengths New media offering greater participation opportunities Motivation to reduce debt levels (public and private) (Over)use of the North Sea for multiple purposes (threat)	Broad agreement that this should not be a key pillar. The purpose of this pillar is unclear and vague Can be achieved under other pillars	Commission expressed the opinion that it would be highly beneficial for the NSRP to become involved in macro-regional strategies in this area as they provide high political visibility for the Programme National interests in 'coordinating' cooperation INTERREG C (especially ESPON and INTERACT II)

Annex 2: Sectoral Policies

Policy Horizon 2020 is the financial instrument implementing the Innovation Union, a Europe 20203 flagship initiative aimed at securing Europe's global competitiveness. Running from 2014 to 2020 with an €80 billion budget, the EU's new programme for research and innovation is part of the drive to create new growth and jobs in Europe. The proposed support for research and innovation under Horizon 2020 will: Horizon 2020 strengthen the EU's position in science; strengthen industrial leadership in innovation, which includes major investment in key technologies, greater access to capital and support for SMEs; and help address major concerns shared by all Europeans such as climate change, developing sustainable transport and mobility, making renewable energy more affordable, ensuring food safety and security, or coping with the challenge of an ageing population. In terms of the link between Horizon 2020 and Cohesion policy the Commission proposes a clearer division of labour between Horizon 2020 and the Structural Funds, while strengthening interactions. Support for regions in building up their research and innovation capacity will be provided through Cohesion policy, which will take forward the concept of smart specialisation and include measures to allow researchers and innovators across Europe to grow into excellence. Complementary measures under Horizon 2020 will aim at widening participation across the whole of the programme. Engaging private sector partners, and in particular SMEs is one of the priorities of the Common Strategic Framework. The N. Sea Region Programme has successfully engaged private sector partners in the 2007 - 2013 period and there is strong support to continue on this path. In this context, the 2008 Small Business Act states that it intends to 'develop a cluster strategy including initiatives to encourage transnational cluster cooperation, facilitating new markets and taking measures to encourage greater participation of SMEs in innovative clusters'. The Commission also 'aims to encourage Member States to learn from good practices by supporting business angel investment, in particular across borders'. The Commission has recently announced the new Programme for the Competiveness of Enterprises and Small and Medium-sized Enterprises (COSME). It makes available €2.5 billion and ensures continuity of the Entrepreneurship and Innovation Programme (EIP) and specifically tackles transnational issues that -SME policy thanks to economies of scale and the demonstration effect - can be more effectively addressed at a European level. Its main objectives are: facilitating access to finance for Small and Medium-sized Enterprises (SMEs) creating an environment favourable to business creation and growth encouraging an entrepreneurial culture in Europe increasing the sustainable competitiveness of EU companies helping small businesses operate outside their home countries and improving their access to markets Although other funding streams are better positioned to provide direct support to SMEs, in many ETC programmes SMEs are at the heart of the programme strategies, objectives and activities. ETC programmes are 'SME friendly' in the sense that they thematically focus on topics such as entrepreneurship, innovation, service provision, market intelligence and networking. Through their networks and contacts ETC programmes can facilitate policy aspirations of the EU.

The EU's LIFE programme is an important instrument for the environment. The general objective of LIFE is to contribute to the implementation, updating and development of EU environmental policy and legislation by co-financing pilot or demonstration projects with European added value. The current LIFE+ programme budget is 2.2 billion.88 The mid-term evaluation of the Programme states that there could be ij. a greater emphasis on mutual learning and shared exchange. Testing of transferability and trans-national co-operation as the basis of stronger multipliers and increased EU value. The minimum indicative of 15% to be allocated to transnational activity would be increased substantially given the contribution of transboundary activity to EU added value. 89 This would suggest that there may be opportunities to better link INTERREG and LIFE projects. Many of the policy challenges facing the N. Sea Region are not unique and can be identified in other maritime spaces. In 2007 the Commission formulated an Integrated Maritime Policy. It recognises that all Integrated Marine Policy of Europe's oceans and seas are interlinked, and that sea-related policies must develop in a joined-up way. Furthermore, a report, Blue Growth report published in 2012 identifies three growth life cycle stages: Mature growth (short sea shipping, offshore oil and gas, coastal tourism, and coastal protection Growth-stage activities (marine aquatic products, offshore wind, cruise shipping, and maritime monitoring and surveillance) Pre-development stage (blue biotechnology, ocean renewable energy, and marine minerals mining) The report highlights shipping, cruise tourism, off shore wind and coastal tourism as strong developed areas in the North Sea. For the future the indicated activities that are expected to continue their growth in the North Sea are, in particular, offshore wind energy and coastal tourism and yachting. TEN-T framework aims to integrate land, sea and air transport infrastructure networks across the Union. In this context, the North Sea is recognised as a project of common interest under the Motorways of Seas priority. Missing links in cross border sections are considered a major obstacle to the free movement. 1. 2. Bottlenecks – in particular the east-west connections require improvement 3. Transport infrastructure between the transport modes is fragmented **Fransport Networks (TENS)** 4. Investments in transport infrastructures should contribute to achieve the goals of reduction of greenhouse gas emissions in transport by 60% by 2050 Harmonise operational rules and requirements. The new TEN-E guidelines make available some €212.5 Billion for the improvement of Europe's energy network. The North Sea is one of the four priority electricity corridors for which the EU has set three priorities: 1. streamlining permit granting procedures 2. facilitating the regulatory treatment of projects of common interest 3. providing necessary market-based and direct EU financial support. The transnational and cross-border nature of TEN-E and TEN-T projects makes territorial cooperation programmes valuable partners for project activities. However, the North Sea Region Programme cannot be expected to undertake massive infrastructural projects for which international agreement at the highest levels is required. However, the developments and impact of TEN-E and TEN-T projects require to be monitored and where necessary the Programme can address some of the associated challenges that arise from such large scale projects (for example ensuring the sustainability of the services feeding to and from these core networks, and address issues of competitiveness for remoter regions). The EU's Culture Programme has three overarching objectives: promote cross-border mobility of those working in the cultural sector; to encourage the transnational circulation of cultural and artistic output; and to foster intercultural dialogue. 90 In this programme, cultural organisations are given support for projects to work together across borders and to create and implement cultural and artistic activities. Its main **Culture Policy** beneficiaries are theatres, museums, professional associations, research centres, universities, cultural institutes and public authorities. The programme offers potential opportunities for linkages and synergies with territorial cooperation programmes depending on the thematic focus and types of activities funded in

⁸⁸ COM (2007) Regulation (EC) NO 614/2007 of the European Parliament and of the Council. http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:149:0001:0016:EN:PDF

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these programmes.

⁸⁹ Arcadic and VITO (2010) Mid-Term Evaluation of the Implemention of LIFE+ Regulation. http://life.lifevideos.eu/environment/life/publications/lifepublications/evaluation/documents/LIFEplus_mte_report.pdf

⁹⁰ DG culture (2009) Culture programme: a serious cultural investment. http://eacea.ec.europa.eu/culture/programme/documents/programme_guide_culture_11_2009_en.pdf

Marine policies and Agendas

Many of the policy challenges facing the N. Sea Region are not unique and can be identified in other maritime spaces. In 2007 the Commission formulated an Integrated Maritime Policy. ⁹¹ It recognises that all of Europe's oceans and seas are interlinked, and that sea-related policies must develop in a joined-up way. Furthermore, a report, Blue Growth report ⁹² published in 2012 identifies three growth life cycle stages:

- Mature growth (short sea shipping, offshore oil and gas, coastal tourism, and coastal protection
- Growth-stage activities (marine aquatic products, offshore wind, cruise shipping, and maritime monitoring and surveillance)
- Pre-development stage (blue biotechnology, ocean renewable energy, and marine minerals mining)

The report highlights shipping, cruise tourism, off shore wind and coastal tourism as strong developed areas in the North Sea. For the future the indicated activities that are expected to continue their growth in the North Sea are, in particular, offshore wind energy and coastal tourism and yachting.

⁹¹ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0575:FIN:EN:PDF

⁹² DGMARE (2012) Blue Growth Scenarios and Drivers for Sustainable Growth from Oceans, Seas and Coasts https://webgate.ec.europa.eu/maritimeforum/system/files/Blue%20Growth%20Final%20Report%2013092012.pdf (30/01/2013)

Annex 3: Territorial instruments

Territorial Instruments European urban and territorial development should be based on the following principles: Integrated Sustainable Urban be based on balanced economic growth and territorial organisation of activities, with a polycentric urban structure; build on strong metropolitan regions and other urban areas that can provide good accessibility to services of general economic interest; be characterised by a compact settlement structure with limited urban sprawl; and enjoy a high level of environmental protection and quality in and around cities. An Integrated Territorial Investment (ITI) instrument⁹³ supports a multi-dimensional, tailored to place-specific features and outcomes approaches which allow the development of cross-Integrated Territorial sectoral integrated development strategies that address the development needs of the area concerned and supports a place-based development strategy. Key elements of an ITI are: a designated territory and an integrated territorial development strategy; a package of actions to be implemented; and specific governance arrangements to manage it is. The Community-led Local Development (CLLD)94 approach is based on the LEADER approach designed to help rural actors consider the long-term potential of their local region. Community-Led Local Development (CLLD) The main aim of CLLD methodology is to: develop integrated bottom-up approaches; build community capacity and stimulate innovation; promote community ownership; and assist multi-level governance

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⁹³ European Commission (2011) op. cit., art. 99 and CSF

⁹⁴ http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/community_en.pdf

Annex 4: Common priorities with INTERREG IV A programmes 95

Annex 4: Common priorities with INTERRE	o iv A progra			1
INTERREG A cross-border programmes overlapping one or more NSRP partner region (or part thereof)	P1 Innovation	P2 Environment	P3 Accessibility	P4 Sustainable Communities
Operational Programme 'Belgium – France' (INTERREG IVA France-Wallonie-Vlaanderen 2007-13): directly covers 15 NUTS3 border regions in the two partner states.	*	*		*
Operational Programme 'Belgium - Netherlands' (Grensregio Vlaanderen-Nederland 2007-2013): directly covers 16 NUTS3 border regions in Belgium and the Netherlands.	*	*	*	*
Operational Programme 'Botnia - Atlantica': Covers Västerbottens län, Västernorrlands län and a small part of Gävleborgs län in Sweden and Nordland fylke in Norway (also covers part of Finland).	*	*	*	*
Operational Programme 'Fehmarnbelt Region': covers Sjælland in Denmark and parts of Schleswig-Holstein in Germany. Has a focus on the Baltic Sea, not the North Sea.	*	*	*	*
Operational Programme 'France (Channel) – England': covers seven NUTS3 regions in France (not in the NSRP) and 20 in the UK, of which seven are in the NSRP area.		*	*	*
Operational Programme 'Netherlands - Germany': covers NUTS3 regions in Weser-Ems (and others North Rhine-Westphalia) in Germany, and NUTS3 border regions in the Netherlands.	*	*	*	*
Operational Programme 'North': Covers Norrbottens län and parts of Västerbottens län in Sweden; and Finnmarks fylke, Troms fylke and Nordlands fylke (also covers part of Finland).	*		*	*
Operational Programme 'Öresund - Kattegat - Skagerrak': covers the Danish east coast, Sweden's west coast and the south coast of Norway.	*		*	*
Operational Programme 'South Baltic': covers a broad area, but only a three NUTS3 regions which are in the NSRP (Bornholms in Denmark, and Skåne län and Kronobergs län) in Sweden).		*	*	*

⁹⁵ Cross-border co-operation programmes which overlap with the NSRP area are shown. This table does not specify the degree of thematic overlap.

Operational Programme 'Sweden - Norway': covers 4 NUTS3 regions in Sweden (one partially) and five NUTS3 regions in Norway.	*	*		*
Operational Programme 'Syddanmark - Schleswig-K.E.R.N.': covers Syddanmark in Denmark and parts of Schleswig-Holstein in Germany.	*		*	*
Operational Programme 'Two Seas' (2 Mers Seas Zeeën Programme): covers regions in France (not within the NSRP area), England (South-West, South-East and East) and Belgium (Flanders).		*	*	*