

# MARITIME TRANSPORT AND FUTURE POLICIES

Perspectives from the North Sea Region



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## STRUCTURE OF THE PAPER

Each of the main themes identified is summarised in its own chapter. Every theme is briefly introduced and referred to by its role in the North Sea Region Programme transport projects, and in the research and business sectors generally. Additionally, links to relevant EU policy papers are given. Finally, recommendations are highlighted for the Members of the European Parliament, the European Commission and the countries in the North Sea Region (EU Member States and Norway). All recommendations are based on the analyses carried out. The intended target for each inspiration are separated and highlighted into three groups: the European Parliament; the European Commission; and the countries in the North Sea Region (EU Member States and Norway) as illustrated below:

RECOMMENDATION	MEP	MS	EC
	★		★

MEP	Member of the European Parliament
MS	Countries in the North Sea Region (EU Member States and Norway)
EC	European Commission

## ABBREVIATIONS

CEF	Connecting Europe Facility
EC	European Commission
EU	European Union
EPCSA	European Port Community Systems Association
ERDF	European Regional Development Fund
GDP	Gross Domestic Product
ICT	Information and Communication Technologies
ICZM	Integrated Coastal Zone Management
ITS	Intelligent Transport Systems
IMO	International Maritime Organization
LNG	Liquefied Natural Gas
MEP	Member of the European Parliament
MTC	Maritime Transport Cluster
MoS	Motorways of the Sea
MS	Countries in the North Sea Region (EU Member States and Norway)
NSR	North Sea Region
NSRP	North Sea Region Programme
RFID	Radio Frequency IDentification
SME	Small and Medium-Sized Enterprises
TEN-T	Trans-European Network for Transport

# INTRODUCTION

This paper is a compilation of results generated by the North Sea Region Programme project Maritime Transport Cluster in 2011/12. It comprises an analysis of all transport related projects within this programme, maritime transport research and the results of a consultation with the maritime industry in the North Sea Region.

In short, this paper offers a holistic perception and represents a common voice for stakeholders of the Interreg IV B North Sea Region Programme on maritime transport, enriched by the challenges, opportunities and experiences of the maritime industry.

The intention of this paper is to provide a coordinated and comprehensive picture of the hot topics for maritime transport in the North Sea Region and to present concrete recommendations for the Members of the European Parliament, the European Commission and the countries in the North Sea Region (EU Member States and Norway). In this way the paper is intended to act as an inspiration and to contribute to discussions on future EU cohesion and transport policy developments, thereby providing a common North Sea Region voice on these issues.

Ten main themes were identified and they bring together a wide range of important and sometimes differing perspectives from within the sector. Namely these themes are:







# A LEADING MARITIME REGION

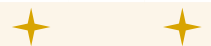
## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

With regard to the EU Integrated Maritime Policy, comprehensively promote the leadership of the North Sea Region in international maritime affairs.



Clearly identify maritime transport within the new ERDF regulation.



Consider maritime transport as a fundamental element of the priorities and areas of intervention in the new operational programme for the Interreg North Sea Region Programme 2014 – 2020.



The North Sea Region is one of the world's leading maritime regions, covering the highest density of ports in the European Union, and is at the centre of the European economy. The North Sea maritime economy accounts for 13% of European GDP and employs 12% of the total EU workforce. In fact, 45% of all maritime cargo handled in the EU is related to the North Sea, and it is also one of the most navigated seas in terms of global ship transit.

The North Sea Region and its maritime sector connect the European economy to global markets, as well as intra-European markets and ensure Europe's competitive edge. However, this important role is often missing from public awareness and understanding.

Highlighting the role of the maritime transport sector has not yet been a topic of the Interreg IVB North Sea Region Programme. Nevertheless, it is regarded as an area of priority by the maritime industry, which may not be able to fulfil its full potential or play its required role (e.g. in the transition to a low carbon transport system) unless its needs are higher on the agenda.

The importance and added value of the maritime transport sector therefore need to be emphasised and the essence and opportunities of maritime transport must be promoted. Through a more focused communication approach, greater awareness and understanding of the maritime sector will be achieved.

The Commission Paper "**An Integrated Maritime Policy for the European Union**" contains calls for the promotion of EU leadership in maritime affairs, and highlights the critical importance of maritime transport in terms of future trade development and hence economic growth.

The **North Sea Region 2020** document by the North Sea Commission defines the promotion of excellence as a priority strategic area.

Maritime transport as such is missing entirely in the **new ERDF Regulation**.

OUTCOMES OF  
INTERREG PROJECTS,  
RESEARCH AND  
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# EFFICIENT TRANSPORT



## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

Keep accessibility as a priority in the operational programme in the new Interreg North Sea Region programme 2014 – 2020. Further projects are needed to provide a solid and harmonised framework for developing efficient transport and logistics activities.



Confirm that the Europe 2020 Flagship initiative “An industrial policy for the globalisation era” calls for actions to implement a harmonised framework to develop more efficient transport and logistics activities.



Refocus the Motorways of the Sea concept to also include well integrated port to hinterland connections as well as setting up seaborne services. There is an urgent need for on-going support to facilitate the efficient connection of sea and land transport.



Ensure that interconnections of transport modes and integration of the transport networks are performed efficiently through freight terminals and Logistics Platforms (Logistics Centres).





The efficiency of the (maritime) supply chain can be optimised amongst other things by further improving the integration between different transport modes. This can best be done by ensuring that ports are effectively connected (both physically and organisationally) to inland freight terminals and logistics platforms. This means the efficiency and the performance of the supply chain could still be much improved.

The Maritime Transport Cluster has demonstrated that supply chain optimisation is a topic where much attention has been put into, both in research publications and in the Interreg projects<sup>1</sup>. Furthermore, the business consultations undertaken have shown that the business sector, in particular on the landside, sees opportunities and also a need for further improving the efficiency of the transport chain with a special focus on hinterland connections. This is viewed in the light of a forecast increase in freight volumes together with high transshipment costs when cargo shifts from one carrier to another. The business sector also pointed out the need for integrated data transfer from seaport (terminal) to hinterland, thus enabling better and faster interconnectivity when selecting a hinterland transport mode.

One of the seven flagship initiatives from the **EU 2020 Strategy** – namely the initiative for “An industrial policy for the globalisation era”, has focused on improving the business environment, notably for SMEs, by 1) reducing the transaction costs of doing business in Europe, 2) by the promotion of clusters, and 3) by improving affordable access to finance. This also includes promotion of technologies and production methods that help reduce the use of natural resources.

In addition **the national transport plans of the North Sea Region countries** include approaches for increasing transport efficiency through using combinations of transport modes and further use of traffic management and information systems.

To achieve improved modal integration and efficient transport solutions across the networks the **TEN-T Guidelines** focus on the implementation of specific requirements in terms of infrastructure, intelligent transport systems, equipment and services.

OUTCOMES OF  
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<sup>1</sup> For information on the NSRP project(s) see chapter “Linking to North Sea Region Programme Projects”.



# SMART SOLUTIONS

## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

<p>Keep smart transport solutions as an area of intervention in the new operational programme for the Interreg North Sea Region Programme 2014 – 2020, in order to ensure that the North Sea Region becomes a leading test bed for development of standardised smart solutions at a European level.</p>	<p>★ ★</p>
<p>Confirm the need to further develop smart transport solutions, in particular supporting the Transport White Paper initiatives 4 and 7 on the “Blue Belt” and E-Freight, taking the necessary actions to facilitate and promote such developments.</p>	<p>★ ★</p>
<p>Referring to the annual report 2010 – 2011 of the European MoS Coordinator, support through the TEN-T MoS initiative the development of an institutional and overarching ICT solution to which transport industry and ports can connect in order to exchange transport information on port calls, capacities, commodities, slots for hinterland modes etc.</p>	<p>★ ★</p>



Today's technological achievements enable new and more efficient information systems, which can assist transport organisations and ensure higher efficiency in the form of greater detail of user and travel information for both companies and the people performing the actual transport function. In this section the focus is on "Smart solutions" which cover the following topics: Information and Communication Technologies, E-Freight, Telematics' Applications, E-Customs, Tracking and Tracing and Satellite Communication.

Interreg projects have delivered interesting results both in terms of establishing Single Window facilities simplifying the availability and handling of information between ports and their hinterland (by bringing all data together in one Single Window for the user), and on ICT systems focusing on improving efficiency, safety and security in the supply chain<sup>2</sup>.

From the research side a high priority for new research on ICT solutions is expressed for both land transport and seaports, mainly in order to optimise the integration of the transport modes.

A core need expressed during the business consultation is about harmonisation of current ICT standards. The business sector underlines that it is better to focus on a few ICT standards and making their use obligatory, compared to continually striving to create new standards. Finally, the business sector welcomes the new opportunities which the introduction of the Galileo satellite system will create on the navigation front, for both land and sea transport.

This topic is reflected in a number of EU policy documents including the EU 2020 Strategy, **the Annual Report 2010 – 2011** of the European MoS Co-ordinator and in all national transport plans of the North Sea Region countries.

The current **TEN-T Annual Work Programme** puts special focus on ICT applications, in particular E-Maritime and Single Window applications and applications for better use of information, communication and positioning technologies.

**Initiative 4 of the Transport White Paper** sets out the idea of a maritime "Blue Belt", which should ensure full inter-operability between ICT systems in the waterborne sector, guarantee the monitoring of vessels and freight, and establish appropriate port facilities.

**Initiative 7 of the Transport White Paper** focuses on E-Freight and the creation of concepts of a Single Window and One-Stop Administrative Shop.

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<sup>2</sup> For information on the NSRP project(s) see chapter "Linking to North Sea Region Programme Projects".

# COMBINING THE MODES



## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

Consider multimodal transport as an underlying element of all transport actions under the new operational programme for the Interreg North Sea Region Programme 2014–2020. Project proposals concerning multimodal transport should be evaluated taking into account tangible results and added value for the transport chain concerned, from both short and medium term perspectives.



Ensure shore-based facilities are adapted to the growing capacity of container vessels by encouraging sufficient hinterland transport facilities, including Dry Ports.



Expand use of syncromodality, where customers at the transport hubs will be given the opportunity to select the most appropriate mode of transport up till the very last moment before the actual transport takes place.



The consolidation of goods volumes is essential in order to promote modal shift and increase the share of combined transport in Europe. Consolidating loads creates the volume needed to sustain regular new services and regular services will in turn attract higher cargo volumes. When frequent and reliable connections between larger and smaller transport hubs are in place, the modalities of rail, short sea shipping and inland waterway transport will have an improved chance of competing with road-only transport options. However, modal shift actions require more than just physical connections. The European focus has recently changed from intermodality, to co-modality, to the latest concept of syncromodality, where all transport options are offered alongside one another at transport hubs and selected according to destination, required turnaround time – and sustainability concerns.

Combining modes and optimising the use of rail, short sea shipping and inland waterway transport is highly prioritised by both Interreg projects<sup>3</sup> and research. Nevertheless, modal shift actions and combinations of transport modes are perceived as an area where still more can be done when it comes to funding opportunities, market integration and research. From a business perspective, the focus on modal shift actions is of high importance.

Policy references include the **Marco Polo Programme** and the initiatives listed in the latest **Transport White Paper**. The latter emphasises the needs and challenges in breaking the transport system's dependence on fossil fuels without sacrificing its efficiency and compromising mobility. One of the means of achieving this is via common community agreements stating that larger volumes of goods should be brought to their destinations by the most efficient combination of modes.

The **Marco Polo programme** focuses on shifting as much freight as is economically and environmentally meaningful, from road to short sea shipping, rail or/and inland waterways. This focus on modal shift of freight to non-road modes of transport is likely to remain in future transport programmes.

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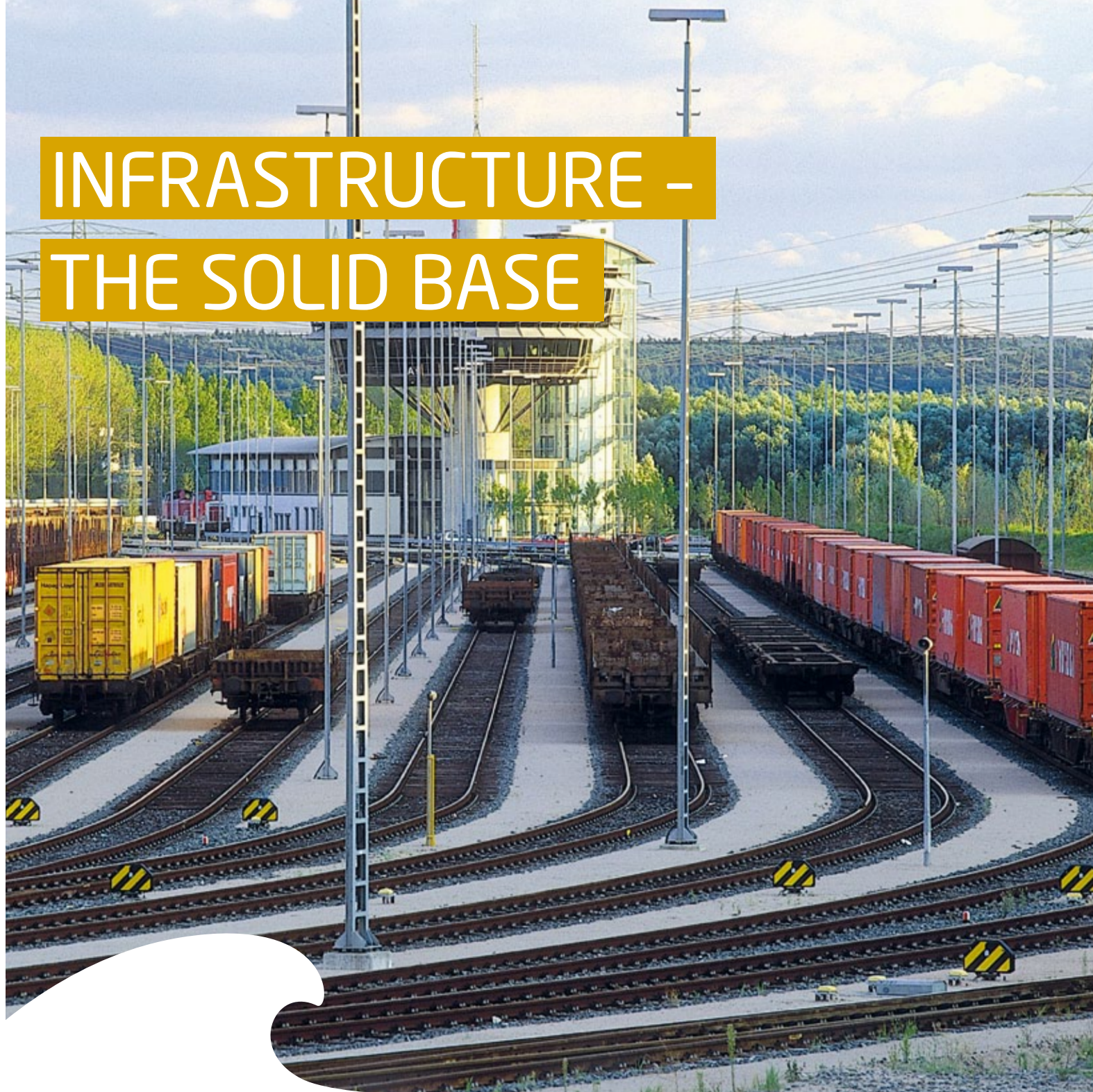
POLICY REFERENCES

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<sup>3</sup> For information on the NSRP project(s) see chapter “Linking to North Sea Region Programme Projects”.



# INFRASTRUCTURE - THE SOLID BASE



## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

Underline the importance of quality hinterland-port connections. Support the focus on port and hinterland infrastructure in the proposals for TEN-T and CEF regulations.



Welcome the focus on green infrastructure (e.g. LNG infrastructure, on-shore power supply, etc.) in the most recent TEN-T calls for tender, and retain green infrastructure as a priority in the future TEN-T programme 2014 – 2020.



Consider opening up the future Interreg North Sea Region Programme for targeted investments in infrastructure, with the aim of increasing efficiency throughout the maritime transport chain.



Infrastructure is the basis for a well-functioning transport chain. Starting at sea and via the ports this includes the inland freight terminals and logistics platforms, through hinterland connections (rail, inland waterway and road). Also included under this theme is service infrastructure and basic infrastructure for the mobility of people.

The current Interreg North Sea Region Programme does not focus on infrastructure as such<sup>4</sup>, whilst possibilities for investing in infrastructure are limited. During the consultations, infrastructure and infrastructure planning together with hinterland connections were clearly put forward by the business sector as key priorities. Optimisation of port infrastructure also seems to be one of the most researched topics in current scientific publications.

Reference to the need for a solid core network of infrastructure was made in the **Transport White Paper** (initiative 34). This initiative was more recently elaborated as part of the dual layer network (core and comprehensive) in the proposals for the **TEN-T** and **CEF regulations**. Ports play a key role in the proposed TEN-T network. Already for some years, **the European Co-ordinator for Motorways of the Sea** has stressed the importance of quality port and hinterland infrastructure in his annual reports to the European Parliament. Art. 3 of the proposal for a **new ERDF regulation** states that the ERDF shall support inter alia investments in transport infrastructure.

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<sup>4</sup> For information on the NSRP project(s) see chapter “Linking to North Sea Region Programme Projects”.



# PLANNING THE NORTH SEA REGION



## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

Define ferries and transnational concepts like cruise tourism because of their impact on territorial cohesion, accessibility and regional development, as relevant topics in the Interreg North Sea Region Programme 2014 – 2020.



Recognize spatial planning as well as Integrated Coastal Zone Management both as means to harmonize macro-regional conditions and support sustainable economic growth, taking into account the fact that maritime transport represents a critical element in driving forward economic growth through trade development.





Connecting seven European countries, the North Sea represents an area that requires balanced regional development in order to form a coherent and prosperous macro-region.

Maintaining and extending accessibility is vitally important but also challenging, especially as the regions are highly non-homogeneous and peripheral regions need to be adequately connected by transport networks (incl. ferries). Here (cruise) tourism plays an important role, too.

Maritime Spatial Planning as well as Integrated Coastal Zone Management are both important means of supporting sustainable economic growth, increasing cohesion and creating a level playing field in the North Sea Region.

Many Interreg projects support regional development by focusing on increasing accessibility<sup>5.1</sup>. However, projects as well as the business sector still need tools to foster the accessibility of peripheral regions in order to create a coherent region.<sup>5.2</sup> Besides this, projects and the business sector highlight the potential of tourism (incl. cruise), for supporting regional development and the accessibility of peripheral regions.<sup>5.3</sup>

Integrated Coastal Zone Management is also being investigated by current projects<sup>5.4</sup> and is seen as being a rising priority and challenge by the business sector (especially ports). The growth of the Integrated Maritime Spatial Planning approaches means that the maritime sector will have to address the same challenges in the future.

The **Annual Report 2010 – 2011 of the European MoS Co-ordinator** states the importance of cohesion also in respect of connecting to the neighbouring countries based on provision of quality MoS services. Cohesion is also an objective of the **Connecting Europe Facility**. The **North Sea Region 2020** document by the North Sea Commission contains as priority 2 “Increasing Accessibility and Clean Transport”. The **EU 2020 strategy** highlights the competitiveness of the tourism sector in its flagship initiative “An industrial policy for the globalisation era”. Integrated Coastal Zone Management is included in the **North Sea Region 2020** document as a priority (“Managing Maritime Space”).

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<sup>5.1–5.4</sup> For information on the NSRP project(s) see chapter “Linking to North Sea Region Programme Projects”.

# GREEN MARITIME TRANSPORT

## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

Support references to sustainable maritime transport in the proposal for the TEN-T regulation, as this confirms the importance of sustainable maritime transport.



Keep sustainable development, with a specific focus on the development and efficient use of green technology, as a key theme in the future operational programme of the Interreg North Sea Region Programme.



Address the issue of recycling (e.g. of ships) in future initiatives.



Promote the use of incentive schemes to improve environmental performance.



Sustainability has become more and more important in recent years, also in the transport sector. The greening of (maritime) transport has become a topic of major importance. A wide range of issues related to sustainable development need to be addressed including the use of fuels and fuel consumption, energy efficiency, alternative drives, green technologies, introduction of invasive species, transport emissions and life cycle perspectives.

The theme of sustainable development is already being addressed in the current Interreg North Sea Region Programme. Analyses from the Interreg projects show<sup>6</sup> that there is still a gap when it comes to issues like fuel consumption, electric drives and renewable energy sources for transport and green technologies. These issues need further attention.

Transport emissions have been a major topic for research over the past several years. Reduction of emissions, alternative drives and recycling of ships are currently heavily debated by the business sector. The sector sees little added value in further tightening environmental obligations for the industry, especially in a regional context, but it is interested in (financial) incentives for companies that work on their environmental performance.

With the exception of recycling ships or the even wider theme of life-cycle perspectives, all elements above are linked to the overarching theme of emissions from transport. This is currently one of the hottest topics in maritime transport.

One of the overall aims of the **Transport White Paper** is the 60% reduction of greenhouse gas emissions by 2050. Sustainable growth is also one of the three pillars of the Europe 2020 strategy, in which decarbonisation of transport is a priority. This sustainable dimension is also present in the current and future **TEN-T programmes** where, for example, environmental performance of ships and availability of alternative fuels are key elements of the policy. The same objectives are set out in the **European Maritime Policy**, where reduction of emissions is a major theme. Recycling of ships will be dealt with in the transposition of the **IMO Hong Kong International Convention** for the Safe and Environmentally Sound Recycling of Ships into EU legislation.

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<sup>6</sup> For information on the NSRP project(s) see chapter “Linking to North Sea Region Programme Projects”.





# RESEARCH AND

# KNOWLEDGE MANAGEMENT

## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

Increase cooperation between local, national and European research initiatives. Consider new dedicated initiatives on maritime transport research or strengthen existing ones.



Strengthen research and innovation as a key theme in the future operational programme of the Interreg North Sea Region Programme. Transfer of research outcomes towards business applications should receive special attention.



Consider the topics of ship design and the impact of maritime transport on marine life as possible priorities for future local, national or European research initiatives. Facilitate knowledge exchange to the maritime sector.



Research contributes to innovation and progress in the maritime transport sector. New developments on the basis of fundamental research can help to make the maritime transport sector more competitive and environmentally friendly. The North Sea Region is host to several important research institutes in the maritime transport sector. The theme covers technical research, Research and Technological Development, innovation and knowledge exchange.

The Interreg projects have asked for more policy attention towards research in the future. Also, the business sector considers research to be one of the most important topics for the future. Despite the good intentions, there still seems to be a gap between the results achieved through research and development projects and what the business sector experiences in its day-to-day operations. Concepts developed in research projects are often not taken to the next level. Competition and confidentiality issues seem to play a role here. Better communication and dissemination of research results on a wider scale is desirable. During consultations it was mentioned that knowledge exchange or coordination of research efforts could be improved, leading to the suggestion that an overarching maritime research network<sup>7</sup> or a dedicated maritime think tank should be created. Ship design was explicitly mentioned as a research priority, with emphasis on improving efficiency, sustainability, and safety. The impact of maritime transport on marine life also needs to be better researched.

The smart growth pillar of the **EU 2020 strategy** calls for the development of a strategic research agenda. The need for innovation in maritime transport also comes forward in the **Transport White Paper** (new fuels and propulsion systems). Both the **new ERDF regulation** and the **North Sea Region 2020 strategy** include innovation amongst the priorities for the next programming period.

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<sup>7</sup> For information on the NSRP project(s) see chapter “Linking to North Sea Region Programme Projects”.



# WORKING IN THE TRANSPORT SECTOR



## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

Support the on-going EU wide harmonisation of job specifications and requirements, acceptance of degrees and final examinations, initiatives on career mapping, while considering neighbouring countries.



Take initiatives on improving working conditions for the maritime transport logistics sector.



Support the new focus on the human capital in the maritime transport logistics sector, as put forward by the European Co-ordinator on Motorways of the Sea.





The maritime sector in Europe represents approximately five million jobs and contributes significantly to the common welfare, especially in the North Sea Region. However, the image of the working environment is not always favourable. The demand on all job levels has increased, reflecting the need for adapting to today's complex logistics services environment. There is a lack of qualified employees. Improved and intensified education and training for the transport and logistics sector will therefore become crucial to ensure that sufficient and adequate staffing resources are available in the future.

Education and training as well as working conditions are covered in Interreg projects<sup>8</sup>, though often as a minor aspect. According to maritime research publications, it is one of the current hot topics. The business sector states that qualifications, education and training are crucial to overcoming the existing lack of qualified workers, especially mariners and truck drivers. The maritime transport industry is taking initiatives on career mapping. In parallel, working conditions need to be improved in order to raise the acceptance and attractiveness of these particular types of key jobs.

The **Transport White Paper** contains the "Social code for mobile road transport workers" (initiative 8) and the "Social Agenda for maritime transport" (initiative 9). Smart and inclusive growth is referred to in the **EU 2020 strategy**, and in the flagship initiatives "Innovation Union" and "An Agenda for new Skills and Jobs". The human capital aspect in the maritime transport sector is highlighted in the **Annual Report 2010–2011** of the European MoS Co-ordinator. The **North Sea Region 2020** document by the North Sea Commission refers to the development of skills and employability within priority 4 "Attractive and Sustainable Communities".

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<sup>8</sup> For information on the NSRP project(s) see chapter "Linking to North Sea Region Programme Projects".





# MARITIME

# BUSINESS PERSPECTIVES

## RECOMMENDATIONS BY THE MARITIME TRANSPORT CLUSTER

MEP MS EC

Take initiatives to ensure a healthy and competitive environment for doing business in the North Sea Region by providing reliable business conditions such as investments in future technologies, standardisation and simplification/reduction of administrative and customs procedures and harmonisation of operational rules and regulations.



Consider new business opportunities in sectors like cruise tourism, off-shore industry and marine renewables when outlining the future European transport and cohesion programmes.





In order to maintain its leading role, the maritime transport sector in the North Sea Region should be able to act and do business within a dynamic and competitive framework. As maritime transport is characterized by a competitive environment, which usually goes beyond regional borders, the necessary business conditions need to be seen in a truly global perspective.

The conditions for sustainable economic growth and the development of maritime business segments are put forward as priorities by the business sector. These include, for example, uniform interpretation of EU competition rules, harmonization of EU regulations and stricter standardisation in the fields of data handling, permits, planning and geospatial information. Excessive regulation is also viewed as a barrier to economic activity and hence trade growth.

Amongst the currently most researched maritime business issues are business strategies, competition, maritime innovation and financing. However, these topics are not included as key aspects of the approved projects in the current Interreg North Sea Region Programme, even though they are all possible project themes. A closer dialogue with the maritime transport sector when drafting new policies or elaborating new initiatives could be beneficial for economic development in the North Sea Region (e.g. by Interreg programmes offering an enhanced possibility to further include the industry sector in projects).

New and rapidly developing business segments like cruise tourism, off-shore industry and marine renewables are identified as opportunities to further strengthen the maritime business sector in the North Sea Region.

The improvement of the business environment is emphasized in the **EU 2020 strategy** and the flagship initiatives “Innovation Union” and “An Industrial Policy for the Globalization Era”. The competitiveness of SMEs is referred to in the **new ERDF Regulation**. The **North Sea Region 2020** document published by the North Sea Commission in priority 4 “Attractive and Sustainable Communities” addresses the competitiveness of sectors and enterprises.

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## SUMMARISED RECOMMENDATIONS

### A LEADING MARITIME REGION

	MEP	MS	EC
With regard to the EU Integrated Maritime Policy, comprehensively promote the leadership of the North Sea Region in international maritime affairs.		★	★
Clearly identify maritime transport within the new ERDF regulation.	★		★
Consider maritime transport as a fundamental element of the priorities and areas of intervention in the new operational programme for the Interreg North Sea Region Programme 2014–2020.		★	★

### EFFICIENT TRANSPORT

	MEP	MS	EC
Keep accessibility as a priority in the operational programme in the new Interreg North Sea Region programme 2014–2020. Further projects are needed to provide a solid and harmonised framework for developing efficient transport and logistics activities.		★	★
Confirm that the Europe 2020 Flagship initiative “An industrial policy for the globalisation era” calls for actions to implement a harmonised framework to develop more efficient transport and logistics activities.		★	★
Refocus the Motorways of the Sea concept to also include well integrated port to hinterland connections as well as setting up seaborne services. There is an urgent need for on-going support to facilitate the efficient connection of sea and land transport.	★	★	★
Ensure that interconnections of transport modes and integration of the transport networks are performed efficiently through freight terminals and Logistics Platforms (Logistics Centres).	★	★	★

### SMART SOLUTIONS

	MEP	MS	EC
Keep smart transport solutions as an area of intervention in the new operational programme for the Interreg North Sea Region Programme 2014–2020, in order to ensure that the North Sea Region becomes a leading test bed for development of standardised smart solutions at a European level.		★	★
Confirm the need to further develop smart transport solutions, in particular supporting the Transport White Paper initiatives 4 and 7 on the “Blue Belt” and E-Freight, taking the necessary actions to facilitate and promote such developments.		★	★
Referring to the annual report 2010–2011 of the European MoS Coordinator, support through the TEN-T MoS initiative the development of an institutional and overarching ICT solution to which transport industry and ports can connect in order to exchange transport information on port calls, capacities, commodities, slots for hinterland modes etc.		★	★

### COMBINING THE MODES

	MEP	MS	EC
Consider multimodal transport as an underlying element of all transport actions under the new operational programme for the Interreg North Sea Region Programme 2014–2020. Project proposals concerning multimodal transport should be evaluated taking into account tangible results and added value for the transport chain concerned, from both short and medium term perspectives.		★	★
Ensure shore-based facilities are adapted to the growing capacity of container vessels by encouraging sufficient hinterland transport facilities, including Dry Ports.		★	
Expand use of synchromodality, where customers at the transport hubs will be given the opportunity to select the most appropriate mode of transport up till the very last moment before the actual transport takes place.		★	★

	MEP	MS	EC
<b>INFRASTRUCTURE - THE SOLID BASE</b>			
Underline the importance of quality hinterland-port connections. Support the focus on port and hinterland infrastructure in the proposals for TEN-T and CEF regulations.	★	★	
Welcome the focus on green infrastructure (e.g. LNG infrastructure, on-shore power supply, etc.) in the most recent TEN-T calls for tender, and retain green infrastructure as a priority in the future TEN-T programme 2014 – 2020.	★	★	★
Consider opening up the future Interreg North Sea Region Programme for targeted investments in infrastructure, with the aim of increasing efficiency throughout the maritime transport chain.		★	★
<b>PLANNING THE NORTH SEA REGION</b>			
Define ferries and transnational concepts like cruise tourism because of their impact on territorial cohesion, accessibility and regional development, as relevant topics in the Interreg North Sea Region Programme 2014 – 2020.		★	★
Recognize spatial planning as well as Integrated Coastal Zone Management both as means to harmonize macro-regional conditions and support sustainable economic growth, taking into account the fact that maritime transport represents a critical element in driving forward economic growth through trade development.		★	★
<b>GREEN MARITIME TRANSPORT</b>			
Support references to sustainable maritime transport in the proposal for the TEN-T regulation, as this confirms the importance of sustainable maritime transport.	★		
Keep sustainable development, with a specific focus on the development and efficient use of green technology, as a key theme in the future operational programme of the Interreg North Sea Region Programme.		★	★
Address the issue of recycling (e.g. of ships) in future initiatives.		★	★
Promote the use of incentive schemes to improve environmental performance.	★	★	★
<b>RESEARCH AND KNOWLEDGE MANAGEMENT</b>			
Increase cooperation between local, national and European research initiatives. Consider new dedicated initiatives on maritime transport research or strengthen existing ones.		★	★
Strengthen research and innovation as a key theme in the future operational programme of the Interreg North Sea Region Programme. Transfer of research outcomes towards business applications should receive special attention.		★	★
Consider the topics of ship design and the impact of maritime transport on marine life as possible priorities for future local, national or European research initiatives. Facilitate knowledge exchange to the maritime sector.		★	★
<b>WORKING IN THE TRANSPORT SECTOR</b>			
Support the on-going EU wide harmonisation of job specifications and requirements, acceptance of degrees and final examinations, initiatives on career mapping, while considering neighbouring countries.	★	★	★
Take initiatives on improving working conditions for the maritime transport logistics sector.		★	★
Support the new focus on the human capital in the maritime transport logistics sector, as put forward by the European Co-ordinator on Motorways of the Sea.	★	★	★
<b>MARITIME BUSINESS PERSPECTIVES</b>			
Take initiatives to ensure a healthy and competitive environment for doing business in the North Sea Region by providing reliable business conditions such as investments in future technologies, standardisation and simplification/reduction of administrative and customs procedures and harmonisation of operational rules and regulations.	★	★	★
Consider new business opportunities in sectors like cruise tourism, off-shore industry and marine renewables when outlining the future European transport and cohesion programmes.	★	★	★

# LINKING TO THE NORTH SEA REGION PROGRAMME PROJECTS

## Chapter 2 EFFICIENT TRANSPORT

<sup>1</sup> The project **NSFRITS** develops an electronic communication and data capture network into ITS which will be placed at strategic positions in key transport corridors to provide live, up to date information regarding traffic flows, congestion, safety and security.

The project **Dryport** develops effective hinterland intermodal freight transport nodes (Dry Ports), to optimize supply chains between ports and the port hinterland, and further tests RFID technology in this context.

The project **Food Port** introduces technological innovation in the food supply chain, enhances political and entrepreneurial awareness for the importance of efficient, effective and sustainable food logistics chains and acts to establish the NSR as a dynamic food port region.

The project **iTransfer** identifies transnational challenges to achieve more cost efficient and CO<sup>2</sup> reduced ferry operations.

The project **LO-PINOD** increases resilience and improves management/operations and diversification for regional ports.

## Chapter 3 SMART SOLUTIONS

<sup>2</sup> The project **NSFRITS** develops an intelligent transport solution which will initially be aimed at the freight supply chain making the sector better able to plan and manage their business operations including traffic flows, efficiency, safety and security issues.

The project **SUSCOD** conducts an inventory and analysis of existing ICZM tools and indicators available as well as further developing a practical and innovative web-based ICZM-assistant for coastal practitioners with stakeholder participation.

The project **POYO** launches a digital platform for training, and exchange of experiences between different sectors with regard to maintenance processes.

The project **BLAST** contributes by harmonising terrestrial and sea geographical data to improve Integrated Coastal Zone Management and planning as well as maritime safety.

The project **E-Harbours** gives an overview of potentials of Smart Grid application in seven NSR harbour cities and quantifies environmental/ financial viability of Smart Grids/electric mobility.

The project **Dryport** supported the EPCSA that promotes the Single Window idea and did tests in RFID on railway wagons.

## Chapter 4 COMBINING THE MODES

<sup>3</sup> The project **StratMoS** promotes and facilitates shift of cargo from road to sea based intermodal transport, and to improve accessibility within the NSR, by supporting the implementation of MoS and related transport networks in integrated logistical chains.

The project **Dryport** supports intermodality by promoting multi-modal accessible hinterland hubs and shifting cargo from road to rail. The project **Food Port** realises green transport corridors for food products by putting modal shift into practice.

The project **LO-PINOD** increases multimodal connections (rail, road, water) between ports and regional economies, as well as accessing potentials to improve links to regional ports through short sea shipping and coastal feeder connections.

## Chapter 5 INFRASTRUCTURE - THE SOLID BASE

<sup>4</sup> The project **iTransfer** designs changes for Gravesham land-side infrastructure in terms of doubling access capacity and reducing investment costs by 40 %.

North Sea Ballast Water Opportunity  
> **NSBWO**  
[www.northseaballast.eu](http://www.northseaballast.eu)



Cruise Gateway North Sea - towards sustainable growth of cruise shipping in the NSR  
> **Cruise Gateway**  
[www.cruisegateway.eu](http://www.cruisegateway.eu)



Bringing Land and Sea Together  
> **BLAST**  
[www.blast-project.eu](http://www.blast-project.eu)



Dryport - a modal shift in practice  
> **Dryport**  
[www.dryport.org](http://www.dryport.org)



Clean North Sea Shipping - Competitive Marine Transport Services AND Reduction of Emission - a North Sea Model (CNSS)  
[www.cnss.no](http://www.cnss.no)



E-Logistics in NSR Harbour Cities  
> **E-Harbours**  
[www.eharbours.eu](http://www.eharbours.eu)



Food Port - Connecting Food Port Regions - Between and Beyond  
> **Food Port**  
[www.food-port.eu](http://www.food-port.eu)





## Chapter 6 PLANNING THE NORTH SEA REGION

<sup>5.1</sup> The project **StratMoS** promotes accessibility to/from peripheral regions as an equal objective to shifting cargo from road to intermodal transport within the MoS regime.

The project **iTransfer** sets up new ferry connections to improve regional access, enables public tendering for ferry services, and understands effects of policy regulations on ferry operations.

<sup>5.2</sup> The project **E-Harbours** translates Smart Grid best practices into policies and near future planning by identification of obstacles and lessons learned.

<sup>5.3</sup> The project **Cruise Gateway** increases maritime accessibility by developing the NSR as a cruise destination and promotes it as a “lighthouse” for sustainable cruise activities.

<sup>5.4</sup> The project **SUSCOD** develops a practical tool, the ICZM-assistant and its introduction to potential users through demonstration of its value at test locations.

The project **BLAST** improves ICZM and planning as well as maritime safety by contributing to harmonising terrestrial and sea geographical data.

## Chapter 7 GREEN MARITIME TRANSPORT

<sup>6</sup> The project **StratMoS** launches a web based tool box for MoS application in respect to environmental and social impacts.

The project **Clean North Sea Shipping** looks into available technology and the implementation of cost effective and cleaner energy supply infrastructure to ships in harbours/ports and at sea.

The project **NSBWO** improves the NSR environment and economy by facilitating the ratification of the IMO Ballast Water Management Convention.

The project **iTransfer** identifies transnational challenges to achieve more cost efficient and CO<sup>2</sup> reduced ferry operations.

The project **Food Port** realises green transport corridors for food products by putting modal shift into practice.

The project **LO-PINOD** improves local, regional and national policies to promote sustainable onward freight distribution.

The project **E-Harbours** gives an overview of potentials of Smart Grid application in seven NSR harbour cities and quantifies environmental/financial viability of Smart Grids/ electric mobility.

The project **Cruise Gateway** investigates on environmental protection issues in cruise terminals in the NSR.

## Chapter 8 RESEARCH AND KNOWLEDGE MANAGEMENT

<sup>7</sup> The project **NMU** constructs a transnational knowledge network, including development of a suite of maritime transport modules which are taught across the NSR using blended learning techniques.

## Chapter 9 WORKING IN THE TRANSPORT SECTOR

<sup>8</sup> The project **SUSCOD** develops a multimedia hub and related educational materials as a course for regional and coastal development officers throughout the NSR.

The project **POYO** enables knowledge transfer in the field of innovative maintenance techniques by the POYO portal, a digital platform for training and exchange.

Next to offering multidisciplinary education at Master and Bachelor level, the project **NMU** constructs a transnational knowledge network, and develops and enhances E-Learning and education.

Innovative TRANsport Solutions for  
Fjords Estuaries and Rivers  
> **iTransfer**  
[www.itransferproject.eu](http://www.itransferproject.eu)



North Sea Freight and Intelligent  
Transport Solutions  
> **NSFRITS**  
[www.nsfrits.eu](http://www.nsfrits.eu)



Logistics Optimisation for Ports  
Intermodality: Network, Opportunities,  
Development  
> **LO-PINOD**  
[www.lopinod.eu](http://www.lopinod.eu)



The Port is Yours  
> **POYO**  
[www.poyo.eu](http://www.poyo.eu)



Northern Maritime University  
> **NMU**  
[www.nm-uni.eu](http://www.nm-uni.eu)



Motorways of the Seas Strategic  
Demonstration Project  
> **StratMos**  
[www.stratmos.com](http://www.stratmos.com)



Sustainable Coastal Development  
in Practise  
> **SUSCOD**  
[www.suscod.eu](http://www.suscod.eu)



# THE MARITIME TRANSPORT CLUSTER

The overall goal of the Maritime Transport Cluster is to build a structure for exchanging the latest knowledge and experiences concerning maritime transport in the context of the Interreg IVB North Sea Region Programme (NSRP). By applying the cluster idea to the maritime transport sector, MTC aims to develop a common voice for maritime stakeholders in the Interreg IV B NSRP. By analysing the maritime transport sector from research results, and from the NSRP and the Interreg IV B projects' perspectives, MTC has created a comprehensive overview that links the Interreg IV B projects together with maritime industry trends and developments (ensuring also the practical relevance) as well as with on-going transport policy developments in the EU. This policy paper represents the final outcome of this process and is composed as strategic policy advice which – based on the North Sea Region experiences – contributes to the on-going discussions on future EU transport and cohesion policy developments.



## MTC PROJECT CO-FINANCED BY

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## PARTNERS

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Port of Hamburg Marketing  
(DE, Lead Partner)



Association of Danish Transport and Logistics Centres  
(DK)



## LITERATURE AND SOURCES

### Chapter 1 A LEADING MARITIME REGION

Indicator: Share of the GDP (current prices) in the Interreg IV B region (NUTS 2) compared to Europe 27. Source: Own calculation based on Eurostat data, table: nama\_r\_e3gdp, last data actualisation: 05/08/2011, downloaded: 05/03/2012.

Indicator: Share of the employment numbers in the Interreg IV B region (NUTS 2) compared to Europe 27. Source: Own calculation based on Eurostat data, table: lfst\_r\_lfe2emp, last data actualisation: 08/07/2011, downloaded: 05/03/2012.

Indicator: Share of the cargo throughput in seaports (ts) in the Interreg IV B region (NUTS 2) compared to Europe 27. Source: Own calculation based on Eurostat data, table: tran\_r\_mago\_nm, last data actualisation: 18/2/2011, downloaded: 05/03/2012.

[...] it [the North Sea] is also one of the most navigated seas in terms of global ship transit. [...]:

P. KALUZA ET ALL, *The complex network of global cargo ship movements* (1093–1103), in: *Journal of the Royal Society Interface*, in: <http://rsif.royalsocietypublishing.org/content/early/2010/01/19/rsif.2009.0495.full.pdf+html>, visited: 05/03/2012, first published online 19/01/2010.

### Chapter 4 COMBINING THE MODES

Syncromodality: JAN FRANSSO (2011) in: *The Pioneer of Syncromodality*, in: *Fast Forward*, Issue 52, winter 2011, editor: Europe Container Terminals (etc.), p.14–15.

### Chapter 9 WORKING IN THE TRANSPORT SECTOR

The maritime sector in Europe represents approximately five million jobs [...]: DR. T. WEBER, A.-M. NEVALA, in: *An exhausted analyses of employment trends in all sectors to sea or using sea resources – Final report for the European Commission*, DG Fisheries and Maritime Affairs, edited by EDOTEC Research & Consulting, United Kingdom, September 2006.

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and Public Works  
(BE)



NIOZ Royal Netherlands  
Institute for Sea Research  
(NL)



Hamburg University  
of Technology  
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Norwegian Coastal  
Administration  
(NO)



KYSTVERKET  
NORWEGIAN COASTAL ADMINISTRATION

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Edinburgh Napier University  
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(NO)





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