Overview of Maritime Transport Related Projects

within Interreg IV B 2007-2013

Port of Hamburg Marketing
Attn.: Stefan Breitenbach
Phone: +49 40 37709 121
Email: Breitenbach@hafen-hamburg.de

MTC
www.maritimetransportcluster.eu

Overview of already approved transport related projects within the Interreg IVB North Sea Region Programme 2007 – 2013

In the following, an overview of maritime transport related projects in a broader sense within the current NSR programme is given. After a brief summary, each of the projects is described in more detail.

Transport related projects: Overview

Project name	Project description	Lead Beneficiary	Transport Mode		
			Sea	Inland waterway	Multimodal
Ballast Water Opportunity	Facilitating the ratification of the **Ballast Water Management** Convention (BWMC)	Royal Netherlands Institute for Sea Research (NIOZ), The Netherlands	x		
BLAST	Improve Integrated **Coastal Zone Management and Planning** and maritime safety by contributing to harmonising terrestrial and sea geographical data	Norwegian Hydrographic Service, Norway	x	x	
Clean North Sea Shipping	**Emission and greenhouse gas reduction from ships**, using studies to reveal the status of air quality in ports and surrounding areas. CNSS will create transparency on cost-efficient technology solutions and develop and improve the introduction of successful air quality programs.	Hordaland County Council, Norway	x		
CRUISE GATEWAY	Developing the NSR as a **cruise destination**	Hafen Hamburg Marketing e.V., Germany	x		
Dryport	Develop effective **Hinterland intermodal freight transport nodes**	Västra Götalandsregionen Regionutvecklingssekretariatet, Sweden			x

E-Harbours	Create a lasting change towards sustainable **energy logistics** for NSR harbour cities	Municipality of Zaanstad, The Netherlands	x		x
Food Port	Develop the NSR as the best **food cluster** and hub in Europe for food products delivered via efficient and sustainable transport systems	Province of West Flanders, Belgium			x
iTransfer	Develop innovative, sustainable solutions to improve regional accessibility by **water-based public transport** in the NSR	Institute for Sustainability, UKc	x	x	
LO-PINOD	Enhance multi-modal accessibility and interconnectivity of **ports of regional importance**	Institute for Sustainability, UK	x		x
NMU	Common and lasting transnational **network of universities** that will directly address the needs of the maritime industry	Transport Research Institute, Napier University, UK	x		
NS Frits	A multi-lingual electronic communications and data capture system for the road freight sector to provide information to end users - drivers, transport managers.	People United Against Crime, UK			x
POYO – The Port is Yours	Focussing on **maintenance processes** in order to increase the efficiency in the production process of the ports in the North Sea Region	Albeda College, The Netherlands	x		
StratMoS	Promote and facilitate the shift of cargo from road to **sea based inter-modal transport**	Rogaland County Council, Norway	x	x	x
SUSCOD	Application of **integrated coastal zone management** through an innovative ICZM ‘assistant' web tool	Province of North-Holland, The Netherlands	x	x	

Project descriptions

Ballast Water Opportunity - North Sea Ballast Water Opportunity

Summary

Ships' ballast water is a main source of acute and chronic pollution in the North Sea. The project aims to improve the North Sea environment and economy by facilitating the ratification of the Ballast Water Management Convention (BWMC). The implementation of the BWMC creates a new market for innovative products; Ballast Water Opportunity aims to support the NSR industry to enter this market. It encourages the ratification of the BWMC through reducing a major barrier: providing treatment and detection equipment.

Aim

Improving the NSR environment and economy by facilitating ratification of the IMO Ballast Water Management Convention (BWMC) through enabling implementation while stimulating the maritime industry to utilize the NSR leading scientific position on aquatic invasions to capitalize this new market opportunity.

Expected Outcomes

- Model regulation for enforcement, best practice and synthesis on economical, ecological, scientific and technological barriers and opportunities;
- A public private centre for transfer of knowledge and expertise on Ballast Water Treatment systems; a test bed for certification of BWT;
- A public private centre for transfer of knowledge and expertise on Detection of organisms in ballast water, a feasibility of tool development;
- Information portal on best practice/opportunities for mitigation of marine bio-invasive species and models; recommendations on legislation opportunities.

Lead Beneficiary

Royal Netherlands Institute for Sea Research (NIOZ), The Netherlands

Mr. J.T.M. Flipsen, hans.flipsen@EMConsult.nl, Tel: + 31 33 253 4820

Project homepage: www.northseaballast.eu

BLAST - Bringing Land and Sea Together

Summary

The BLAST project has a primary focus on "Bringing Land and Sea Together", by harmonizing and integrating land and sea data as well as improving collaboration between member states at national, regional and local level.

Aim

The overall aim of the project is to improve Integrated Coastal Zone Management and Planning and maritime safety by contributing to harmonising terrestrial (collected by topographic mapping or cadastral agencies for development, nature conservation etc.) and sea geographical data (collected by hydrographical survey services for marine navigation), by developing planning and visualisation tools as well as improvement of navigation, in the context of climate change. The project will provide a

prototype for land/sea interoperable database for testing by practitioners. Also a conceptual model for integrated spatial planning utilising GIS, tools for spatial planning in respect to renewable energy plants, and a web based decision support system for ICZM will be developed.

Expected Outcomes

- Deploy and test the decision-support system in practical planning contexts in four different municipalities
- Disseminate and increase knowledge on estuaries among expert groups
- Increase capacities on tide estuary management
- Regional estuary working groups
- Convince policy makers: Harmonized starting point for future estuary management
- TIDE Measure Box available to other estuary managers, experts and decision-makers
- Catalogue of measures to ensure proper functional estuary design

Lead Beneficiary

Norwegian Hydrographic Service, Norway

Mr. Roy H. Mellum, roy.mellum@statkart.no, Tel +47 32 11 81 00

Project homepage: www.blast-project.eu

CNSS - CLEAN NORTH SEA SHIPPING: Competitive Marine Transport Services AND Reduction of Emission – a North Sea Model

CNSS Clean North Sea Shipping

Summary

CNSS will focus on emission and greenhouse gas reduction from ships, using studies to reveal the status of air quality in ports and surrounding areas. CNSS will create transparency on cost-efficient technology solutions and develop and improve the introduction of successful air quality programs. Promoting the development of efficient and effective logistics solutions, the maritime transport system will step into a transition processes to meet the demands of enlargement and sustainable development at the same time.

Aim

The project will look into available technology and the implementation of cost effective and cleaner energy supply infrastructure to ships in harbours/ports and at sea. CNSS wants to contribute to the large scale installation of “clean shipping” technology e.g. by developing cost-effective implementation concepts (show-cases). Furthermore CNSS wants to pave the way for an incentive and regulatory framework which causes an increased use of environmentally friendly technologies and fuels in shipping and at the same time maintain the competitive position of the North Sea maritime transport.

Expected Outcomes

- Manual on using different Air Quality Programmes;
- Joint North Sea Shipping Strategy;
- Develop a joint “Environmental Statement”;
- Guideline on implementation towards cleaner shipping;
- Study on impact of future ship emission scenarios;

- Show case of harmonised monitoring/simulation in 2/4 ports.

Lead Beneficiary

Hordaland County Council, Norway

Mr. Lars Tveit, Lars.Tveit@post.hfk.no, Tel: +47 55 23 93 21

Project homepage: www.cnss.no

CRUISE GATEWAY - towards sustainable growth of cruise shipping in the NSR

Summary

Cruise Gateway will increase the maritime accessibility by developing the NSR as a cruise destination and promoting it as a 'lighthouse' for sustainable cruise. Cruise Gateway, at the end of the day, will have launched the brand 'Green Cruise North Sea' and will have opened up 'white spots', thus attracting more and new cruise passenger consumer groups to the NSR ports and their hinterland.

Aim

Cruise Gateway seeks to develop the recognition and attractiveness of the NSR by highlighting the cultural richness as well as sustainable, economic development. Being at an early stage in this respect, the NSR has a unique chance to set the course for success while at the same time taking into consideration aspects of sustainability right from the start.

Expected Outcomes

- Creation of the brand 'Green Cruise North Sea';
- Establish a marketing strategy and base-line study to strengthen the touristic potential of cruise tourism;
- Develop policy blueprints and dissemination in the Policy Forum;
- Improve of service quality in ports; Deliver and transfer best practices regarding passenger transport, sustainability and services;
- Environmental certificates for environmental-friendliness of cruise ships.

Lead Beneficiary

Hafen Hamburg Marketing e.V., Germany

Mr. Sebastian Doderer, doderer@hafen-hamburg.de, Tel:+49 40 37709113

Project homepage: www.cruisegateway.eu

Dryport - a modal shift in practice

Summary

Working together through a programme of workshops, studies and site visits, the Dryport partners will examine the development, design and effective operation of dryports that are fully integrated with the freight handling systems of the seaport facilities they serve. Dryport is about helping to support port

capacity by improving hinterland distribution hubs and looking at the potential of 'inland ports' with multimodal connections.

Aim

The project aim is to develop effective Hinterland intermodal freight transport nodes -Dryports that are fully integrated with the Gateway's freight handling systems, to adapt a public concept to a private sector model, to monitor CO_2 effects and to integrate Dryports into the EU Motorways of the Sea concept. The project includes the identification of suitable dryport land sites in the NSR, to assess the environmental and socio-economic impact of improved inter-modality, to develop a business model blueprint and to develop and start-up an IT system. All project activities will contribute to connecting the dryports with the short sea shipping system to shift interregional transport from road to sea.

Expected Outcomes

- Three dryports set up in cooperation with gateways,
- Gateway with a hinterland dryport structure,
- Transformation of hinterland hubs towards dryports,
- Monitoring-Instruments for gateway-hinterland movements,
- Research material on rail potentials,
- Estimation of CO_2 claims of various modes of transport,
- Motorway of the Sea scheme.

Lead Beneficiary

Västra Götalandsregionen Regionutvecklingssekretariatet, Sweden

Mr. Rolf Thor and rolf.thor@vgregion.se; Tel: +46 31 630947

Mr. Dirk Harmsen info@dryport.org, Tel: +46 70 5144977

Project homepage: www.dryport.org

E-Harbours - E-Logistics in NSR Harbour Cities

Summary

E-Harbours aims to create a lasting change towards sustainable energy logistics for NSR harbour cities. It will set innovative energy standards to create a transformation of the energy network in harbour areas. Show cases will provide examples for the NSR, guided by a European expert platform. By this the project will implement EU energy policies, develop innovative solutions and allow economic growth.

Aim

The aim of E-Harbours is a transformation of the energy network in NSR harbour cities towards a more sustainable and accessible energy model. This will be achieved by setting/implementing new standards with a focus on two key aspects: virtual power (VPP) plants for industrial end-users and electric mobility.

The network plans to:

- Enlarge the uptake of renewable energy;
- Improve energy efficiency;
- Integrate electric mobility;

- Maintain the stability of the energy network.

E-Harbours will create a transnational knowledge platform and methodology for optimal integration of renewables in energy intensive harbour cities using available features as electric cars, electric boats, flexible consumption patterns of industrial end-users and ICT-infrastructures.

Expected Outcomes

- Implement 7 innovative show cases in the participating harbour areas;
- Create a VPP: transnational methodology for optimal integration of renewable energy sources in a energy intensive harbour cities;
- Create a framework (technical, economical, organizational) for large scale implementation of E-Harbours in the NSR.

Lead Beneficiary

Municipality of Zaanstad, The Netherlands

Mr. Jan Schreuder, J.Schreuder@Zaanstad.nl, Tel: +31 (0)62 902 7834

Project homepage: www.eharbours.eu

Food Port - Connecting Food Port Regions - Between and Beyond

Summary

Food Port will develop the NSR as the best food cluster and hub in Europe for food products delivered via efficient and sustainable transport systems. The project will investigate and develop green transport corridors for food products between regions around the North Sea. This will lead to concrete modal shift pilots along the identified green transport corridors and to the development of (new) food platforms or hubs. In order to improve the food-logistic chains, new technological solutions will be incorporated.

Aim

The central aim is to improve the accessibility and transport-logistic system of different food clusters, in order to strengthen the food industry within the NSR and its strategic position as a food hub. This will be achieved through the optimisation and coordination of the food supply chains, delivering tangible benefits to food and logistics sectors and the companies involved. These companies will benefit from measures designed to improve efficiency, effectiveness and sustainability.

Expected Outcomes

- Realisation of a minimum of 5 modal shift pilots for selected green transport corridors for food products;
- Data sets for the food supply chain and appropriate ICC-technologies;
- Strategic master plan for the further development and realisation of food hubs and distribution centres;
- Regional food logistic action plan/transnational logistic action plan;
- Market inventory on inter/intra oriented regional food products flows.

Lead Beneficiary

POM West-Vlaanderen, Belgium

Mrs. Liesbet Pauwels,liesbet.pauwels@west-vlaanderen.be, Tel: +32 5040 7225

Project homepage: www.food-port.eu

iTransfer - Innovative TRANsport Solutions for Fjords Estuaries and Rivers

Summary

Improving water-based public transport is a key issue in the NSR to safeguard sustainable accessibility of regions which would otherwise be inaccessible or suffering from their remote location. The iTransfer partners pursue an implementation-oriented approach to improve water-based accessibility by fostering development of Technology, Operation and addressing Policy issues (TOP) on the national and EU level.

Aim

The aim of iTransfer is to develop and present innovative, sustainable solutions to improve regional accessibility by water-based public transport in the NSR via a TOP approach:

- Resolve Technological issues (design of ferries and landings),
- Improve ferry Operation (integration of ferries with the public transport system and set-up of new ferry connections)
- Support a Policy environment which resolves tendering problems and recommend comprehensive barrier-free access solutions.

iTransfer seeks a strategy on 'how' to make efficient use of the potential of ferries for public transport. The project will develop a new ship design, adapt a ship for eco-fuel and build a tide proof landing, and build critical mass to show new policy options.

Expected Outcomes

- Installation and launch of an innovative accessible NSR ferry-landing and a sustainable standard NSR ferry operating with liquefied natural gas (LNG);
- Set-up of new ferry connections;
- A joint knowledge base on ferry operation;
- Improve accessibility of places, higher sustainability of passenger transport and increase efficiency of public transport systems.

Lead Beneficiary

Institute for Sustainability, UK

Mr. Ed Metcalfe, ed.metcalfe@instituteforsustainability.org, Tel: +44 0207 517 1835

Mr. Mark Thirkell mark.thirkell@instituteforsustainability.org, Tel: +44 0207 517 1834

Project homepage: www.itransferproject.eu

LO-PINOD - Logistics Optimisation for Ports Intermodality: Network, Opportunities, Development

Summary

LO-PINOD aims to enhance multi-modal accessibility and interconnectivity of ports of regional importance. The project will focus on three aspects: the seaside, the port itself and the hinterland connections.

Aim

LO-PINOD's aim is to make regional ports more accessible, sustainable and competitive transhipment nodes and thereby contribute towards a more balanced polycentric European transport network. The project seeks to enhance selected segments of the multi-modal transport network, to demonstrate how it is possible to facilitate more efficient movement of goods, to make better use of available capacities and spread the associated opportunities beyond large gateways.

Three topics will be addressed:

- INLAND - Improving multimodal landside links, testing how multimodal schemes integrate regional ports to their national/EU transport network and to each other.
- PORTS - Developing regional ports into efficient and diversified transhipment nodes through joint staff schemes to improve procedures e.g. security, safety, and to develop and integrate new markets;
- SEASIDE - Seaside accessibility and linking ports with towns by developing connections to main routes and gateway ports, and activities with local communities.

Expected Outcomes

- Investment initiation for multi-modal inland connections of regional NSR ports;
- Upgraded skills & staff knowledge pool of LO-PINOD ports;
- Set-up of new transport connections and integrate new port services into the EU multi-modal network;
- Increased strategic support on the national and EU policy level.

Lead Beneficiary

Institute for Sustainability, UK

Mrs. Laurienne Tibbles, laurienne.tibbles@instituteforsustainability.org.uk, Tel: +44 (0) 207 517 1846

Project homepage: www.lopinod.eu

NMU - Northern Maritime University

Summary

The NMU project is building on the broad range of knowledge and expertise in the NSR which is being harnessed within a common and lasting transnational network of universities. The "Northern Maritime University" will directly address the needs of the maritime industry: To better prepare maritime business managers to cope with growing maritime traffic, port development, and rising environmental challenges, by developing multidisciplinary and internationally oriented qualifications at Bachelors and Masters level.

Aim

- Strengthen the maritime business sector and to increase its capacity for innovation within the NSR (and BSR);
- Strengthen the competitiveness of the industry and services sector;
- Contribute to sustainable development of the growing maritime transport business sector
- Establish a European Area of Research and innovation for the maritime business;
- Strengthen the competitiveness of the European education industry in the maritime business sector in comparison to global competitors and removing obstacles for labour, academic and student mobility.

Expected Outcomes

- Common curricula for North Sea Region oriented maritime business management programmes with qualifications at Bachelors, Masters and CPD levels,
- Qualification offerings in maritime business management including e-learning modules,
- Stakeholder study, a NMU "Toolbox" identifying the maritime sector's educational needs in the NSR,
- NMU portfolio and a roadmap for programme and content development,
- Professional accreditation of programmes and qualifications,
- NMU network

Lead Beneficiary

Transport Research Institute, Napier University, UK

Mr. Gordon Wilmsmeier, g.wilmsmeier@napier.ac.uk, Tel: +44 (0) 131 455 2976

Project homepage: www.nm-uni.eu

NS Frits

Summary

The project addresses efficiency and effectiveness of the North Sea Region transport freight. To secure the NSR as a global competitor, the project develops an intelligent transport solution (ITS), which will improve accessibility, reduce environmental damage in the North Sea Region and enable the NSR to develop a dynamic logistics solution which is scalable across the EU.

Aim

An electronic communications and data capture network will be developed into ITS that will be placed at strategic positions in key transport corridors to provide live, up to date information regarding traffic flow, congestion, safety and security.

The ITS will initially be aimed at the freight supply chain and will employ the most relevant Information and Communication Technologies (ICT) and equipment to transmit and receive data in a series of languages to lone workers as they travel throughout NSR.

Expected Outcomes

- A multi-lingual electronic communication and data capture system for the freight supply chain to provide information to end users/drivers, fleet/transport managers, freight handlers about the conditions in the area that they are about to enter.
- Three pilot projects to test the effectiveness of the communications system;
- Recommendations to regional and national level entities and other potential stakeholders;
- Valuable information for freight supply chain making the sector better able to plan and manage their business operations including traffic flow, efficiency, safety and security issues.

Lead Beneficiary

People United Against Crime, UK

Mrs. Helen Parr, helen.parr@people-united.org, Tel: +44 114 2758688

Project homepage: www.nsfrits.eu

POYO - The Port is Yours

Summary

POYO is focussing on maintenance processes in order to increase the efficiency in the production process of the ports in the North Sea Region and thereby to enlarge competitiveness and innovation opportunities. POYO is strengthening and empowering networks to create an international cluster in the NSR, thereby laying the basis for knowledge transfer on innovative maintenance techniques and the development of an EU standard towards certification of all maintenance techniques.

Aim

POYO will enable knowledge transfer in the field of innovative maintenance techniques so that European certification can be fostered. The binding factor in the strengthening of a 'maintenance cluster' will be to come towards a standard on certification of all maintenance techniques. This will enable the industry, policymakers and knowledge institutes to focus on their core competences, reaching innovation and economic growth for the whole area. Certification also means education. To ensure conformity to certification standards staff has to get and kept up to date through training.

Expected Outcomes

- State of the art-inventory on maintenance techniques and the skills needed;
- 4 physical centres of excellence on maintenance issues;
- POYO portal, digital platform for training, and exchanges of experiences between different sectors;
- 4 digital courses on maintenance;
- Network of 500 companies in at least five countries;
- Action plan and Handbook for a European certification on maintenance courses.

Lead Beneficiary

Albeda College, The Netherlands

Mr. M. Rescigno, m.rescigno@albeda.nl, Tel: +31 (0)622556230

Project homepage:

StratMos - Motorways of the Seas Strategic Demonstration Project

Summary

The project aims to promote and facilitate the shift of cargo from road to sea based inter-modal transport. STRATMOS strives to improve accessibility within the North Sea Region by supporting the implementation of the Motorways of the Sea concept and related transport networks in integrated logistical chains. The project intends to provide input for the Master Plan to be developed by the North Sea MoS Task Force. Also practical demonstration projects will be carried out in order to demonstrate actions to be taken by public and private actors to improve the effectiveness of inter-modal transport, in particular related to hubs and hinterland connections.

Aim

Promote and facilitate 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.

Expected Outcomes

- Transnational solutions for 'invisible' intermodal transport (pilot trials, recommendations on intra-port traffic, technology related change management),
- Recommendations for efficient hubs, hinterland connections and on intra-port traffic,
- ICSO platform for container monitoring, ICT platform for cargo operations,
- Strategies for connecting transport networks and corridors. Develop functional concepts for connecting transport networks, comprising hubs and transport axes / corridors, by defining requirements for investments in infrastructure and facilities,
- A system model of MoS and intermodal transport,
- Guideline MoS strategic demonstration project.

Lead Beneficiary

Rogaland County Council, Norway

Mr. Gunnar Eiterjord, Gunnar.Odd.Eiterjord@rogfk.no, Tel: +47 51 51 66 00

Project homepage: www.stratmos.no

SUSCOD - Sustainable Coastal Development in Practise

Summary

SUSCOD aims to make a step change in the application of integrated coastal zone management (ICZM). 7 partners from 5 countries will develop an innovative ICZM 'assistant'. This practical web based tool will allow coastal development practitioners to fully realise coastal potentials: economical, social and environmental.

Aim

Central to SUSCOD is the development of a practical tool: the ICZM-assistant and its introduction to potential users and demonstrated value at test locations. Existing tools that assess the state of ICZM are of ex ante and too much of that which is scientific in character. The development process will apply and test the assistant in a variety of pilot situations and it will allow coastal developers to assess

their project at any stage in the development process and to determine points of attention to ensure the fully integrated development of their project.

Expected Outcomes

- Risk analysis scenarios, an integrated evacuation and a warning system.
- Inventory and analysis of existing ICZM tools and indicators available. Reviewing the present status of IZCM implementation in the partner regions, including ICZM tools as being applied in the light of challenges imposed by climate changes.
- Developing a practical and innovative web-based IZCM-assistant for coastal practitioners with stakeholder participation.
- Multimedia hub and related educational materials: a course for regional and coastal development officers throughout the NSR.
- development of waterways.

Lead Beneficiary

Province of North-Holland, The Netherlands

Mr. Gertjan Nederbragt, nederbragtg@noord-holland.nl, Tel: +31 23 5143199

Project homepage: www.suscod.eu