



NORTHERN MARITIME CORRIDOR



For more information about the project, please visit www.northernmaritimecorridor.no where you will find maps, a project description, a list of partners, news, reports and future agenda.

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Projects in the Northern Maritime Corridor



NORTHERN MARITIME CORRIDOR

NMC and Motorways of the Seas

The Northern Maritime Corridor is stretching from the Continent and UK/Scotland in the south to Norway and Russia in the north east and to Faroe Islands, Iceland and Greenland in the north west. The Northern Maritime Corridor (NMC) is an EU funded Interreg III B project, having the vision:

The Northern Maritime Corridor – a means of efficient, safe and sustainable transportation, connecting coastal areas and enhancing regional development in the North Sea Region and the Northern Periphery Region.

A main challenge is to contribute to moving cargo

away from road transportation to intermodal and sea transportation. The NMC is involved in a number of short sea shipping initiatives with the aim of establishing new and improved services in the regions.

The present NMC project started in 2002 and will be wound up at the end of 2005.

A number of short sea shipping initiatives that NMC is involved in complies well with the criteria set. Therefore, the NMC project will support companies in submitting application for Marco Polo support.

“NMC II” – the Follow-on Project

A number of initiatives taken in the present NMC project will not be finalised within the project period. Therefore, a “NMC II” project, with the sub-title “Motorways of the Northern Seas”, has been developed. The project application for the North Sea region was approved 10 March 2005. The project will be launched during spring 2005, and will continue the good cooperation between the present NMC partners as well as some new partners.

The main aim of the follow-on project is two-folded: To pursue and further develop concrete short sea shipping initiatives, and to contribute to policy development and policy changes on national and international level. The NMC II will promote the Northern Maritime Corridor as a Motorway of the Sea within the framework of the Trans-European Network (TEN-T) as well as developing ideas and recommendations in respect to polycentric port structure, harmonisation of framework conditions, ICT based tools, application of technological developments, and best practice guidelines for establishing new intermodal short sea shipping services.

The Marco Polo Programme

The Marco Polo programme is geared at shifting cargo from road to rail and sea. Intermodale services that can prove a potential for such shift above a certain minimum limit of tonne-kilometer, are eligible for substantial financial operational support over maximum three years.

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NMC Partner Regions

The NMC project has 20 partner regions from 8 different countries around the North Sea and in the Northern Periphery. In addition, the counties of Murmansk and Archangel in North West Russia have been participating actively in the project.

The project comprises a wide range of actors in the private sector and public sector, like export and import industries, shipping companies, transporters, forwarders, ports and relevant governmental bodies on county and national level.

The NMC project is an arena for networking among all these actors, providing a “breeding ground” for developing ideas and taking initiatives to establish new and improved short sea shipping services.

NMC Activities

The partner regions have established Regional Maritime Clusters with a wide range of participants from private and public sector. They have assessed the challenges and potentials in improving short sea shipping, and taken this into the transnational working groups and sub-projects for further development of ideas and initiatives.

The NMC Project has four thematic strands with transnational working groups:

- Promotion of short sea shipping and development of new services in the corridor
- Seafood transport and logistics
- Maritime transport in the petroleum sector
- Development of a sustainable NMC (risk management strategies)

TEN-T and Motorway of the Sea

The EU Commission has in 2004 issued new guidelines for the Trans-European Network – Transport (TEN-T). This time the Commission has included a new type of priority projects, namely the concept of “Motorway of the Sea”. This implies that the Member States can apply for support to investments in defined Motorways of the sea, comprising investments in port facilities, rail and road connections to ports etc.

However, the presently defined motorways of the sea are ending up in the middle of the North Sea and is lacking a defined connection to the northern seas. The Northern Maritime Corridor fits perfectly into the concept of Motorway of the Sea (MoS), and can provide the linkage between the presently defined MoSs and countries in the northern waters.

Amsterdam	507
Cuxhaven	674
Stavanger	1140
Kirkenes	2716

Projects in the western corridor

Smyril Extended Service (SES)

Faeroe-based Smyril Line operate a ropax ferry service between Iceland, Faeroe, Shetland, Norway and Denmark. A large new luxury ferry was introduced in 2003 capable of carrying almost 1,500 passengers as well as cars and trailers/containers. At the instigation of Smyril Line shareholders, the NMC project carried out a 'Viking Cruise Study'.

This study showed that there was a large demand for cruises in the North Atlantic. However, the market was mainly from the UK and Germany, plus France and Benelux countries, and with a continental port call only in North Denmark (Hantsholm), this market was not being penetrated to any significant extent.

There was therefore a need for Smyril to extend its service down to a Benelux port to access these markets, as well as take advantage of fly-cruise opportunities. A NMC Transport Study found that most of the fresh seafood was produced in the North Atlantic area served by Smyril Line, but that the demand for these products was essentially the same markets as for the cruise trade - UK, Germany, France and Benelux. Again, a key weakness for Smyril Line related to its continental port call being very distance from these major markets.

The results of this research indicated a potentially very significant demand for a weekly Cruise & Fresh Seafood Ropax ferry service between Iceland/Faeroe/Shetland and a Benelux seaport.

RoRo Relay Service

The recent introduction of three fast and frequent RoRo/Ropax services connecting strategic ports and markets in the Northern Periphery and the North Sea Region led to an initiative to link these services together to help solve certain supply chain difficulties. The three services - Smyril Line, Northlink Ferries, and Superfast Ferries - would provide a non-road through service between Iceland, Faeroe, Shetland, and the UK and North Europe.



The basic idea is for freight to be transferred at two strategic hubs - Lerwick in Shetland, and Rosyth near Edinburgh. It is at these terminals that the ferries intersect and hence generate non-road interchange possibilities for freight. Once current service re-tendering processes are completed it is expected that this initiative will once again gain further momentum.



Highland Intermodal Terminal



The NMC Highlands & Islands regional maritime cluster identified a number of short sea shipping actions that would be necessary to further extend sea transport services in the area. The lack of a specialized Highland Intermodal Terminal in the Inverness area was regarded as a significant constraint and resulted in an excessive dependence on long distance road transport. A strategy is now being put together to establish if a HIT can be developed in the area.

Orkney International Container Transshipment Terminal

Transshipment is the fastest growing sector of the container port market. Larger ships are constantly being introduced and these ships are less suited to multiport schedules, with lines reducing the number of direct port calls and hence relying more on transshipment. Serious port congestion in northern Europe and in the UK, added to constant increases in traffic growth, has resulted in ongoing demand for new container port capacity.

However, many of the established ports have found it very difficult to add further capacity due to environmental constraints, lack of space, local traffic congestion, insufficient water depth, and as a result excessive investment requirements. Moving transshipment markets to a natural deep water island terminal such as Scapa Flow in Orkney therefore results in significant environmental benefits, as well as reducing average feeder and mainline steaming distances so reducing emissions and safety risks, as well as avoiding local land transport congestions.



This concept also fits well global trends to develop deep-water island transshipment hubs able to minimize overall shipping costs substantially.

The Orkney harbour authority has now selected a port development company to take the proposal forward.

Norway - Benelux: Intermodal service for seafood

Background and objectives

The Benelux area represented by the ports of Eemshaven, Groningen and Zeebrugge are close to the Western European seafood market. They are also located close to the major distribution centres for northbound cargo to Norway.

Kristiansand is located in South Norway – thus representing the shortest sea distance to mainland Europe. On the other hand, the northern part of Norway represents the area in which we find the largest production of seafood, such as salmon, white fish and pelagic species.

The objective of this initiative is to establish a new intermodal transport corridor offering an environmental friendly and reliable service

based on rail and ship, in order to improve the trade connection between Norway and Western Europe. The project will be considered successful when a new sea route from Kristiansand to Benelux has been established.

The EU has estimated that transportation on road will increase by 40 percent from 1998 to 2010. To avoid traffic congestion the EU seeks to stimulate a modal shift from road to sea, and to railroad transport. Trucks are already subject to road tax, such as the Germans MAUT introduced in January 2005.

The new corridor will reduce transportation by road on the continent, in Sweden and Norway.

Project partners

The five counties of Nordland, Nord-Trøndelag, Vest Agder, Groningen and West-Vlaanderen decided to take forward a project focusing on the seafood logistics from Northern Norway to the Benelux region. The Norwegian Rail Infrastructure Company (Jernbaneverket) and one of the main cargo operators on rail in Norway, Cargonet AS, also joined the group.

Associated partners are the major logistics companies in Norway.

By the end of March 2005 it was clear that there is no technical or operational difficulties in operating trains from Northern Norway to Kristiansand harbour directly, with further connection to a sea service to the ports of Eemshaven (The Netherlands) and/or Zeebrugge (Belgium).

The project period is from August 2004 – December 2005. The project will be continued in an NMC II project starting January 2006

The Concept

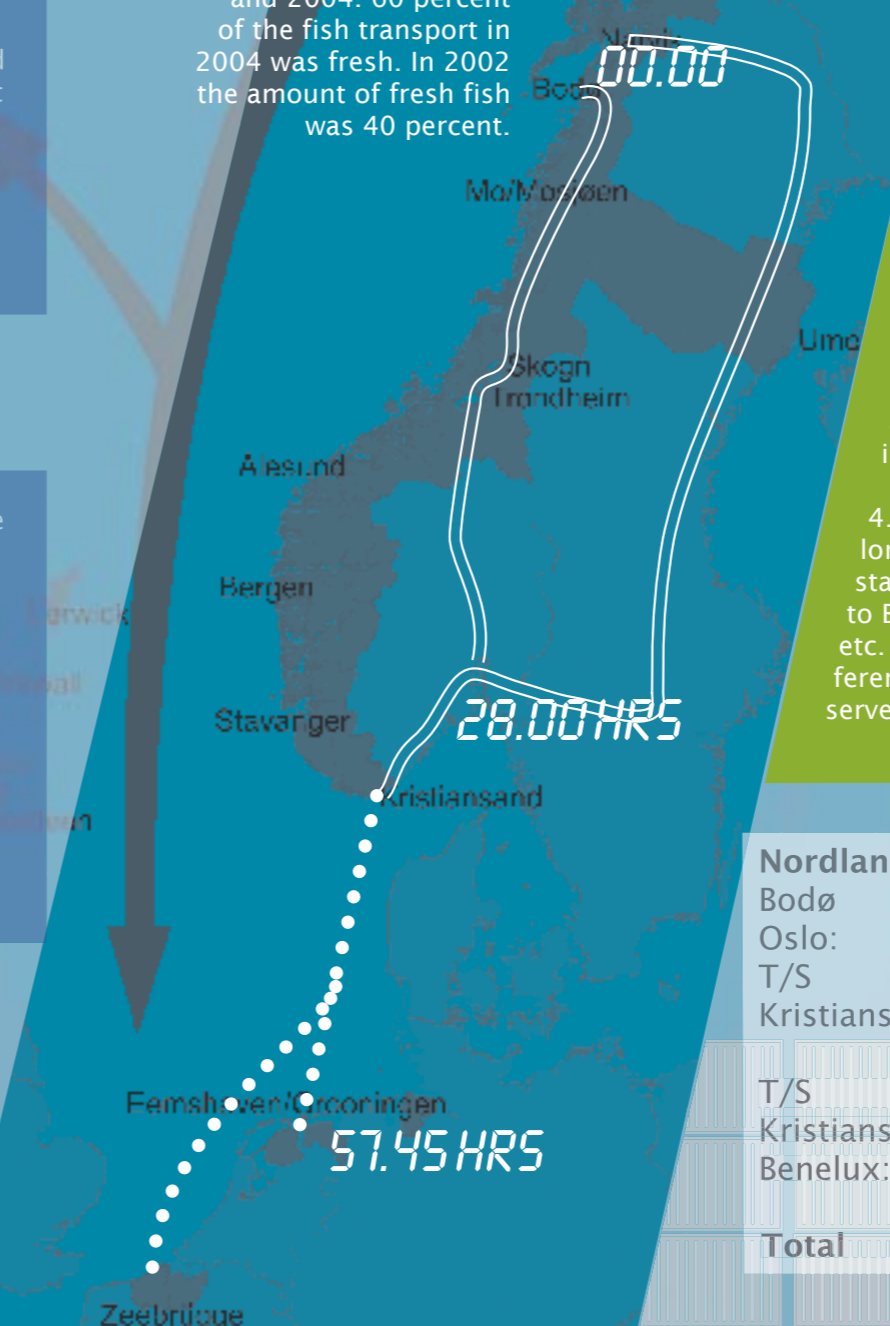
1. Fresh seafood from the Norwegian fish processing industry along the coast line (salmon and white fish) are the main southbound cargo. The seafood is consolidated on existing rail services operating from Narvik and Bodø respectively. The train destination is Oslo with further connection to Kristiansand harbour. Oslo is the main logistic hub and distribution centre for most cargo in Norway.

2. Daily ro/ro or ropax service from the port of Kristiansand to ports in the Benelux area. Uniform cargo units (trailers, containers) help to intermolly connect both rail and ro/ro ship. The ports in question are located close to the major seafood markets in Western Europe, including the UK market.

3. The Benelux area has several distribution centres for flowers, fruit and groceries, and thus representing a large potential for northbound cargo. Kristiansand is again very well positioned for the major import markets in south Norway, including the logistic centre Oslo.

4. Modern fast ropax solutions (e.g. 25-30 knots) on long-distance ferry routes could also be used in this instance, offering overnight travel for Norwegian passengers to Benelux etc. and also travel for Benelux, French/Italian etc. tourists heading to Norway. This concept is highly differentiated from the current short sea services which mostly serve northern Denmark and north Germany.

In 2004 ca. 35.000 tonnes of fish was transported on Nordlandsbanen. On ARE from Narvik the total numbers range from 35.000 tonnes to 48.000 tonnes between 2002 and 2004. 60 percent of the fish transport in 2004 was fresh. In 2002 the amount of fresh fish was 40 percent.



Nordlandsbanen		ARE (Arctic Railway Express)	
Bodø		Narvik	
Oslo:	22:00	Oslo:	28:00
T/S	02:00	T/S	02:00
Kristiansand:	05:45	Kristiansand:	05:45
T/S	02:00	T/S	02:00
Kristiansand		Kristiansand	
Benelux:	20:00	Benelux:	20:00
Total	51:45	Total:	57:45

There is 90,000 tonnes of fish on rail in Norway

Bridges across the North Sea

Sea-Cargo - SCO5 Project

Sea-Cargo core business is the transportation between its hub ports in West Norway, mainland Europe and UK offering twice weekly departures in each direction.

The SCO5 project is designed to develop a new transport bridge between the West Coast of Norway to/from the Continent and to/from East Coast of UK by creating a fast, reliable and safe transport corridor, using modern ships, providing high frequency with sufficient capacity for all types of unitized cargo.

The system will be developed and implemented based on the present activities of Sea-Cargo AS, but the system is meant to introduce a completely new offer to the market – a high frequency system with short lead-time for all types of unitized cargo – with special focus on containers, trailers and other RORO units.

The idea behind this project is to develop a system that is competitive with alternative modes of trans-

port (road transportation) – enabling shifting of cargo from road to sea. This can only be achieved by offering an alternative “bridge” with shorter (or equal) lead-time combined with competitive prices.

The first major step towards the final goals of the project was taken at the end of January 2005 when Sea-Cargo put a new vessel, “SC Norrland”, into service between West Coast Norway and Holland. This increased the annual carrying capacity by almost 500.000 tonnes and improved the lead-time for the cargo owners.

The SCO5 project is progressing as planned and Sea-Cargo is now in the final stage of contracting two new ships. Their plan is gradually to implement new modern ships and the first two new-buildings, MP/RORO ships, will be put into the UK trade in 2006. In 2007 another new modern 20 knots RORO ship will be added for the NL trade.

The NMC Project has during the process contributed to the sea-cargo market analysis.

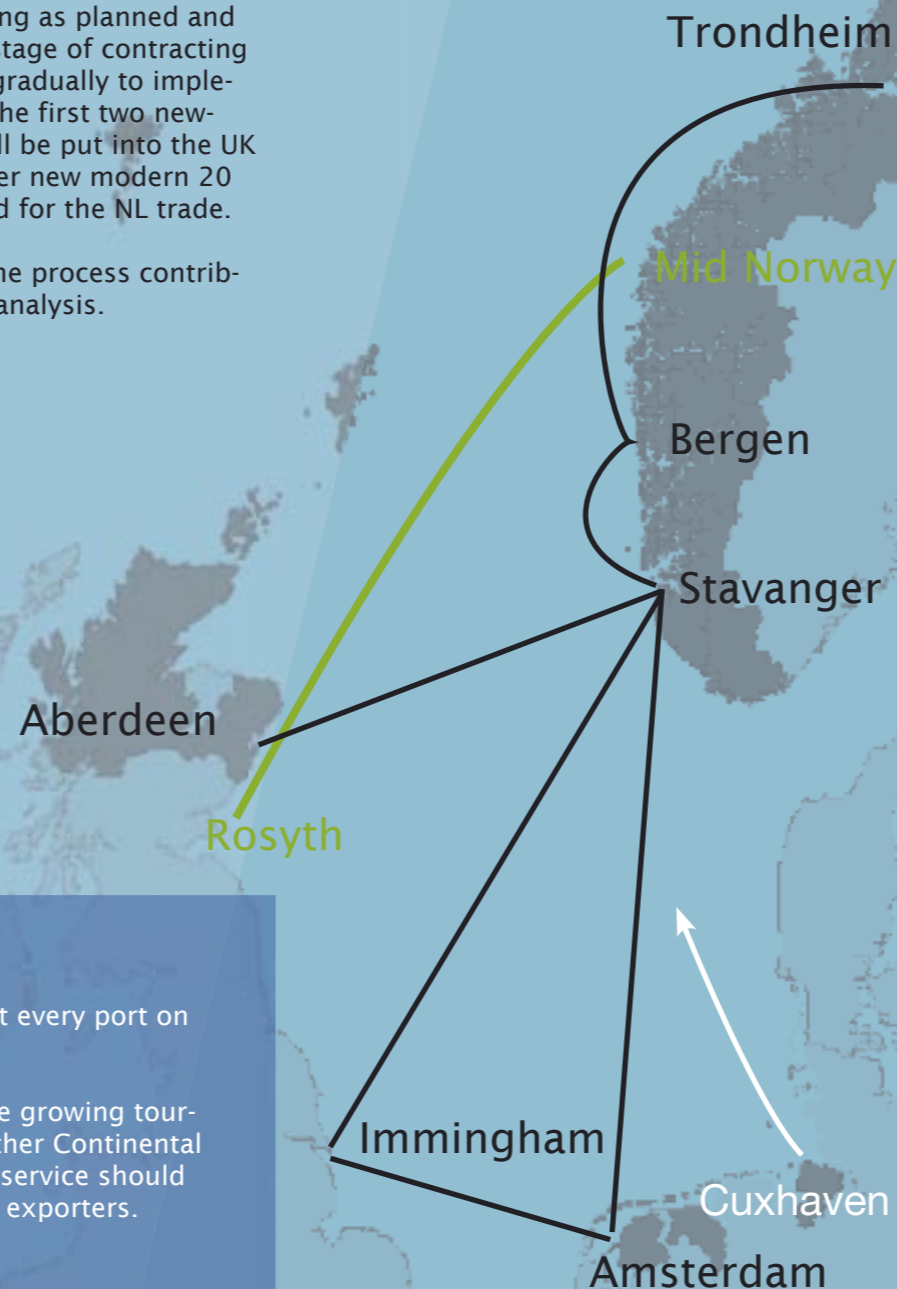


RoPax Service Cuxhaven – Western Norway

The shipping company NorFerries has approached NMC for cooperation in planning for a new fast RoPax service between Cuxhaven in Germany and the Western Norway. NorFerries are planning to contract two ships of the “Superfast” type (29 knots), and each ship are planned to make two round trips every week. The ships are planned to call Stavanger, Bergen,

Alesund and Trondheim, but not every port on each trip.

The new service should meet the growing tourist market from Germany and other Continental countries. As for cargo the new service should be of most interest to fresh fish exporters.



Minoro

The aim of the proposed service – Minoro – is to establish a RoRo combined Ropax ferry service between Mid Norway and Rosyth in Scotland/UK. The service will be connected to the existing Superfast service between Rosyth and Zebbrugge.

The service will be connected to the existing Superfast service between Rosyth and Zebbrugge and will then give a sea based corridor from Mid-Norway to the continent in addition to a new direct service connecting Mid-Norway and UK.

The intended schedule would be based on a two or three day weekly service at each port.

The business idea of the service is to improve the accessibility to UK/Ireland and to France/Iberia etc for the industry (processing, pulp, tourism, etc.) from the Northern Region. An additional effect is the possibility to attract import cargo direct to the Northern Region instead of using Gothenburg/Oslo as cumbersome gateways.

The tourist industry will particularly be offered an opportunity to sell leisure travels to both the Norwegian and the UK market. Some examples are Mid Norwegian skiing resorts, The Fjords, the Highlands, Ireland, etc

Apart this service there is no international ferry connections from Mid Norway today, and it is expected that the proposed ferry service will be a boost to the local trading environment.

All unit load freight vessels serving mid-Norway just now are designated lo/lo containerships or conventional lo/lo-based containerships (carrying (ISO) containers on deck) or equipped with side ramps for truck-to-truck pallet handling. This is the present and most dominant situation within Norwegian sea transport. The only RoRo-service offered so far in the Mid Norway region is Sea-Cargo’s Trondheim-Kristiansund-Molde-Alesund-Bergen-Stavanger-Aberdeen connection (M/V Aberdeen) once a week.

Photo coming here

The maritime link to the Barents Area

Connecting the Barents Region with the Coastal regions in Europe



Barent Intermodal Service

NMC seminars and meetings held in north west Russia helped to establish the need for this area to improve its connections with North European markets. It also enabled the key actors to consider the potential opportunity that exists for the ports of Murmansk and Arkhangelsk in particular to offer a route into the Russian interior as an alternative to the heavily congested and expensive Baltic Sea gateway ports such as St. Petersburg. The aim of the BASIS study will be to assess the competitiveness of an alternative intermodal sea transport route, and this also links into the need to improve port services and infrastructure in the Barents Sea area. It is expected that the results of this research will be presented to key decision makers, such as container lines and terminal operators at a seminar to be held in the Benelux region during first half 2005.

Murmansk



Both Murmansk and Archangelsk harbour are directly connected to the Russian railroad network. Photo: Tomas Nilsen.

Archangelsk



In the case of Archangel, ice classed tonnage will be essential. Photo: Thomas Nilsen

Kirkenes



From Kirkenes the distance to the Russian railroad network is only 40 kilometers. Building a rail link across the border has an estimated cost of 250 million €. Photo: Kirkenes Harbour

Arctic oil transshipment



Early NMC studies and visits to the Arctic region of Russia and Norway resulted in recognition of the very large volumes of oil traffic expected from this area over the next 10-20 years. The Scottish oil transshipment terminals at Sullom Voe and Scapa Flow, as well as Cromarty, decided that this traffic was of potential interest to their facilities. An NMC study demonstrated that for certain tanker sizes and deep-sea voyage distances, then transshipment of Russian Arctic oil via Scottish oil terminals could result in significant cost savings for industry. This message has been communicated to key decision makers and an ongoing marketing initiative is in process.

Barents Sea: An alternative to the Baltic Sea

The service is anticipated to involve one or more ports of call on the Continent. In the Barents Sea region the port options to be considered are Archangel, Kirkenes and Murmansk. A fundamental element of the BASIS action is the realisation of a high-quality container terminal in the Barents Sea Region. The absence of such a terminal is believed to act as a constraint to trade.

Arctic Russia does not currently benefit from a frequent, low cost container service connecting that area with the main markets/ports in northern Europe, the latter also giving access via transshipment to global markets. Present services are based on multipurpose tramp tonnage offering limited service provision and frequency. Container terminal facilities, intermodal connections, and Customs formalities in the Barents Sea region also need to be improved if the economy is to become more competitive.

It is expected that the development of the oil and gas industry will be followed by a rapid growth in the demand for cost efficient sea-transport. During the NMC-project there has also been several initiatives to look into new searoutes based on indus-

trial cargo. Most likely are combinations of export of timber and/or metal from North West Russia with imports of industrial cargo/and or metal from Europe and Norway. Timber from Russia is a valuable rawmateriel both for the industry on the continent and in Sweden. The ports in North West Russia could also play an important role if the trade between the US and Russia develops.

The dramatic growth in Russian traffic flows over recent years has placed considerable pressure on the port of St. Petersburg in particular. St. Petersburg suffers from a number of major constraints including congestion, ice, high port handling charges and other related costs. Nevertheless, in the absence of good links and port facilities elsewhere in Russia to serve the European and global marketplace, traffic continues to take this routing.

An obvious option is therefore to use a port in the Barents Sea Region. Until now, however, the Barents transport option has been largely ignored, primarily because of a lack of adequate port facilities (i.e. a high-tech container terminal) and hence absence of regular scheduled container services.

A future in oil & gas



Barents area – a new global oil province

One of the main priorities in NMC to establish a Maritime link to the Barents Region.

The project focuses on the transportation of goods between the North Sea regions and on connecting the North Sea basin with both the Northern Periphery area and the industrial developments and transportation needs of the Barents region. The oil & gas developments will be a key driver for development in the Barents area

The developments in the Barents Region will be important not only for Norway and Russia and the local industry. The geo-political situation and the

high oil-prices secure that this region will become an important resource base for the global oil companies. The oil export from the region represent a considerable volume and will also be a driver for further development.

The maritime link to Barents Region aim to be an important channel for trade and release the potential for regional development by connecting the coastal regions and combine the resources. The NMC ambitions can be summarised in the following key words: Networking – Business potential – Regional development.

Export of oil and gas

Although the Barents area has several strengths, we also know that the infrastructure to support oil&gas developments is limited. Increased export from the region requires new infrastructure. In February 2004, Russian state oil company Rosneft chartered Bergesen's very large crude carrier Belokamenka (1980-built, 360,700 dwt) to act as a floating storage and off-loading vessel at Murmansk. This has permitted a continuous flow of aframax tankers and smaller tankers to transport the crude across the Barents and Norwegian seas. Statoils Snøhvit-project in Hammerfest also generate export volumes.

Total Russian oil production is now around 9.3 million barrels a day. NMC research suggested that possible export growth of crude oil through Murmansk could reach 20 million tonnes per year by 2010, and as much as 45 million tonnes per year by 2015. More optimistic scenarios speculate that a volume of 80 million tonnes per year could be reached sometime between 2010-15. It is anticipated that most of this traffic will be destined for markets in UK, EU and USA.

Supplies to new oil & gas developments



The global requirement for more oil & gas will require a substantial field development in the region. Development of the Prirazlomnoye fields is already in progress and prospects are identified both in Norwegian sector (Goliat) and in Russia (Shtockman) These projects will generate need for supplies and development both related to oil & gas installations and also related to port and communication infrastructure as other public infrastructure. Such developments will attract the international supplier industry and components will be sourced from a global market.

Foto: Statoil

Safety at sea

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Other related projects

North East Cargo Link

The North East Cargo Link (NECL) is a mid Nordic transport corridor to important international markets in the EU and around the southern and eastern Baltic.. It will also represent a better connections both to the Russian and UK markets for cargo from this huge region.



The project was started by business interests back in 1996, but the

cooperation between regional and local authorities has gradually increased. From 2002 NECL also became a part of EU's interreg IIIB program – one year ahead of the NMC. No investments have been made, so far, by local or regional authorities in the corridor. The first of June 2004 the maritime link from Central-Norway to the continent was established after heavy investments in terminal facilities in Rotterdam and Skogn and most important of all – a new vessel – the “Lysblink” (picture) offering a weekly containerline service. 50 percent of the Cargo is paper-products from Norske Skogs plant at Skogn. Norske Skog, who is one of Europe's biggest paper producers has been one central actor in the NECL-project.

From 2007/2008 there are plans for increasing the capacity preferable with a new ro-ro vessel. This year (2005) the cargo-link will be strengthened when the ferry-service between Sundsvall (Mid-Sweden) to Wasa in (Mid-Finland) is reopened in May.

One of the main missing link in the corridor is the railroad between Sweden and Norway (Meråkerbanen at the Norwegian side). This part of the railroad system is not upgraded to carry same level of tonnages as the railroad in rest of Norway and Sweden. Estimated cost for upgrading is 40 mill. NOK. On the Meråkerbanen (75 km) there is also a need to change from diesel driven locomotives to electricity.

Efficient Transport Chains (ETC)

A joint project by Northern Maritime Corridor and Shortsea Shipping Norway

The objective to this sub-project was to create real-time, integrated and automated intermodal transport processes with one-stop-shopping and custom-oriented self-service for shippers and transport partners. The main Objective for the participants is to achieve a Productivity gain of 2% per year through improved service to shippers, more efficient transport management and higher capacity utilization and margins in the transport chain.

The following processes was included in work: Marketing, Scheduling, Sales, Contracting, Allocation, Confirmation, Enquiry, Quoting, Booking, Cancellation, Cargo Planning, Spacing, Equipment Management, Collect Planning, Delivery Planning, Intermodal Collection, Loading, Discharge, Intermodal Delivery, Customs, Claims, Invoicing, Supplier Payments, Reporting

The Participants developed a requirement specification to use in the process of choosing administrative software to support the business processes mentioned above.

The participants was Baltic Line, Color Line, Faero Ship, LTL, NCL, Samship, Sea-Cargo and many of the participants have implemented the software after the project.

