REPORT ON:

MOTORWAYS OF THE SEA
(UK North Sea) WORKSHOP

Held at:
Rural Centre Boardroom
Road Haulage Association (RHA)
Ingliston, Edinburgh EH28 8NZ

Monday 5th June, 2006

Annex 2.3.1 to the Final Report

June 2006

Napier University
Transport Research Institute
PREFACE

This workshop report has been written as part of the SUTRANET project (Work Package 2: Motorways of the North Sea). SUTRANET (‘Sustainable Transport Research & Development Network in the North Sea Region’) is a project within the framework of the European Commission’s (EC’s) Interreg IIIB North Sea Programme.

The report describes the user group workshop organised by Napier University’s Transport Research Institute (TRi) and held in Edinburgh on 5 June 2006.

SUTRANET, June 2007

Jorgen Kristiansen, Aalborg University, Denmark
1. AIM OF THE WORKSHOP

A SUTRANET half-day workshop was held at the Rural Centre Boardroom, Road Haulage Association (RHA), Ingliston, Edinburgh on Monday 5th June, 2006. The workshop/user group related to Work Package 2 of the SUTRANET project concerning Motorways of the North Sea. The aim of the workshop was to bring together interested parties to explore possibilities and potentials for the development of a coastal/regional UK Motorway of the Sea for freight transport as an alternative to long-distance road transport.

Invited persons attending the workshop included representatives/experts from transport and logistics firms, seaports, shipping service providers, government, and from the research community. Similar workshops are to be held in several other European countries bordering the North Sea as part of the SUTRANET Project.

The workshop began with a series of presentations describing the state of the art in terms of existing Motorways of the Sea operations in Europe and further afield, assessing the challenges faced by the long distance road haulage sector, followed by analysis of recent improvements in port technology and infrastructure, and a description of UK government support for maritime intermodal transport initiatives. This was followed by a workshop session that allowed attendees to explore how such initiatives might be taken forward and implemented. The workshop programme is attached as Annex I, with the list of attendees as Annex II.
2. INTERREG IIIB SUTRANET PROJECT

SUTRANET (Sustainable Transport Research & Development Network in the North Sea Region) is a project funded under the EC Interreg IIIB Programme. The vision of SUTRANET is to improve the knowledge-base for developing efficient and sustainable transport networks in the North Sea Region.

SUTRANET consists of the following ten partner organisations, and which includes many of the main transport and logistics research institutes in Europe:

- Aalborg University (AAU) – Lead Partner
- FDT – Association of Danish Transport and Logistics Centres
- Institute of Shipping Economics and Logistics (ISL), Bremen
- Institute of Transport Economics, Oslo
- SINTEF Civil and Environmental Engineering, Norway
- University of Applied Sciences, Kiel, Germany
- Møreforskning Molde, Norway
- IVL Swedish Environmental Research Institute, Gothenburg
- Napier University Transport Research Institute, Edinburgh
- Erasmus University, Rotterdam

The SUTRANET project consists of 4 work packages:

- North Sea Transport Research and Development Network
- Motorways of the North Sea
- Transport and Logistics Centres
- Training Programme Development

For further information on the SUTRANET Project please consult the website: www.sutranet.org
3. WORKSHOP PRESENTATIONS

The workshop began with a series of presentations covering topics related to the development of motorways of the sea in the UK and elsewhere. Most of the presentations can be downloaded from the SUTRANET website.

Jorgen Kristiansen of Aalborg University, the lead partner in SUTRANET, outlined what the project was about and explained the work that was being done and the role of motorways of the sea in this regard.

Phil Flanders of the Road Haulage Association highlighted the significance of the UK road haulage industry to the economy and to society and discussed many of the key issues and challenges road hauliers now faced. This included fuel cost increases, worsening road congestion, and the impact of foreign truckers on the internal UK road haulage market.

Alf Baird of Napier University illustrated the practical outcomes and achievements of motorways of the sea using a series of relevant case studies. These highlighted the typical length of sea routes, type of vessels (mostly RoRo and Ropax), traffic volumes achieved, cost comparisons with road transport, and the impact of road tolls, bottlenecks and other relevant factors.

Duncan Gray of Forth Ports plc gave a presentation on the port facilities offered at Forth Ports main locations along the east coast UK, including Rosyth, Grangemouth and Tilbury. The company was now making significant inroads into the port-related logistics sector, with further developments ongoing in regard to intermodal connectivity of seaports. Forth Ports are ready and prepared to accommodate new motorways of the sea services in the UK.

David Eaglesham of the Scottish Executive described the two main UK grant schemes that can be used to assist motorways of the sea start-ups. These are the Freight Facilities Grant (FFG) and the Waterborne Freight Grant. FFG mainly relates to capital support for infrastructure and equipment within intermodal facilities. WFG is aimed more at the revenue needs of a new service, with a focus on the first 3 years of a new service, funding based around the projected shift of tonne-kilometres from road to sea (and rail).

This initial session of presentations was then followed by a workshop in which specific questions were addressed by the attendees, the latter comprising experts representing a wide range of sectors, both private and public. Specific questions considered included the technical, operational and organisational requirements for a UK regional motorway of the sea, and following on from this the question of how such a service might best be implemented.
4. TECHNICAL, OPERATIONAL AND ORGANISATIONAL REQUIREMENTS

(a) Fuel Cost and Foreign Competition

Transport logistics firms raised the issue of fast rising fuel costs in the UK, and higher fuel taxes. It was argued that foreign hauliers were taking more of the internal long-distance UK market because of their ability to buy cheaper fuel on the continent, sufficient for a roundtrip in the UK. Foreign truckers also benefited from the use of free roads in the UK, which is not the case in several other EU countries, notably Germany, France and Italy. A further issue related to the reliability of road haulage and the fact that worsening road congestion was making just in time delivery more and more difficult for transport operators.

(b) Port Linkages

Whilst the workshop had a focus on the domestic UK transport market, it was pointed out that this market is also serving EU and global freight flows. It is likely therefore that a coastal MoS in the UK would also serve EU and global trade to some extent as well. The question this raised was how best to tackle all of these markets.

A particular issue related to trade imbalances for the Scottish market. Scottish export traffic to the continent is stronger than the inbound market, with most of the latter moving via southern England and the Midlands. How could a UK MoS best tackle the freight imbalances?

(c) Triangular MoS Service

One way proposed to overcome the trade imbalance issue was to introduce a triangular service, perhaps based around some adaptation of the existing successful Superfast Rosyth-Zeebrugge service. A clockwise service such as Rosyth-Zeebrugge-Tilbury-Rosyth was proposed to effectively address the imbalance issue (Figure 1). Such a service would appear to fit well with the strong Scottish export market to the EU, the dominant EU-England trade, and the stronger England-Scotland trade. However, there would be implications for the passenger market (for the existing service) given changes in port calls, transit times, and scheduled departure and arrival times. A triangular service would probably have more emphasis towards the freight market, which to some extent is regarded as the higher growth sector.

(d) Markets

There was a feeling that a MoS would have quite limited focus on the parcels or similar sectors which required very rapid transportation and short delivery times.
The focus of a UK MoS is therefore more likely to be towards slower moving products and freight that is to some extent sensitive to transport prices. There may also be products where the supply chain can be adjusted to fit in with a coastal MoS service, the latter offering a high degree of reliability, and consistent service quality.

Figure 1: Possible triangular UK MoS service
5. IMPLEMENTATION OF A UK MOTORWAY OF THE SEA

(a) Service Operator

The specific type of service innovation noted above (i.e. triangular) could be attractive to the existing Rosyth-Zeebrugge operator, Superfast Ferries. However, this change of operation would require additional vessels, more especially in order to maintain a daily schedule, something which almost all domestic/regional MoS services provide. Further work will be required to establish optimal sailing and arrival times, and to estimate port turnaround demands which may have an influence on specific vessel design.

Transport and logistics sector representatives at the workshop found the example of UN RoRo in Turkey highly informative. UN RoRo is a freight ferry service which is owned and operated by the Turkish road transport association on behalf of its hundreds of members, including both small and large hauliers. The UN RoRo model involved ship chartering in the initial phase, though the company now owns its fleet of ships. The ship operation itself is outsourced to a UK ship management company. All UN RoRo haulier shareholders are charged the same rate per trailer irrespective of how large the trucking firm is. UN RoRo profits are distributed to shareholder truckers in the form of dividends.

Another option could be to provide a MoS service via a joint venture between relevant actors. This might include, for example, the road haulage sector, plus ship manager or ship operator, and perhaps a port/terminal operator.

(b) Catalyst

There was a view that the kind of change or transformation envisaged would require some form of catalyst in order to drive it forward. The Turkish example highlighted the role of the road haulage association in this regard, the latter still effectively managing the UN RoRo operation, and viewed as an acceptable organisation to undertake such a task.

There would inevitably be a requirement to generate traffic flows for a MoS service but the UN RoRo example highlighted how effective than can be through the trucking industry becoming a key integral part of the overall operation.

Forces for change, such as strong foreign trucking competition, worsening road congestion, UK driver shortages, and rising fuel costs, were also viewed as having a positive influence on a MoS. However, there would be a number of instances where supply chains would have to be adjusted in order for the MoS to offer an effective solution.
(c) Ship Availability

It was suggested that due to increasing demand for RoRo and Ropax ship types needed to open up new MoS services, this particular type of vessel was currently in rather short supply. It was therefore possible that new ships would need to be built for such a service.

However, certain yards do build for the charter market (e.g. Visentini, Italy), whilst German KG funds are specialists in building for the charter market also, albeit with a stronger emphasis on container ships.

(d) Start-up Risk

In-depth research would be necessary to assess the market size, plus give individual sectoral analyses to clarify specific supply chains in sufficient detail. New ferry start-ups can involve slow development and this adds to the financial risk.

The government’s FFG and WFG schemes are designed to help new service-start-ups develop. WFG’s of up to €2.0 million may be available depending on the modal shift potential, although a UK MoS of the type envisaged might expect to easily qualify for this maximum grant. The grant is payable over the first 3 years of the operation, on a reducing basis. Larger FFG awards may be made for related infrastructure (e.g. ferry terminal investments).

Assuming a new MoS service attracted 90,000 freight units over a 3-year period (e.g. 20,000 units in year 1, 30,000 in year 2, and 40,000 in year 3), WFG equates to just €22 per trailer. In all probability such subsidy levels may not be sufficient considering the present market distortions (i.e. free UK road use for foreign hauliers, the latter also benefiting from cheaper fuel bought on the continent). Hence the maximum limit for WFG of €2.0 million in the UK may need to be raised in order to assist modal shift start-ups on the scale envisaged.

The UN RoRo experience highlighted the importance of the road haulage sector participating in the MoS operation as owners/shareholders. In this regard the trucking community itself guaranteed the traffic volumes to its own ferry operation from Day 1. This had the effect of significantly reducing the level of risk involved in the commercial operation. Though it should be noted that existing MoS services elsewhere in Europe have come about and exist in instances where there are already road tolls, and/or road transport is highly problematic (e.g. via countries of former Yugoslavia, poor roads in Eastern Europe etc.).
ANNEX I

MOTORWAYS OF THE SEA (UK North Sea) WORKSHOP

PROGRAMME

0900 Arrivals and Coffee

0920 Welcome and Introductions
     Dr. Jorgen Kristiansen,
     SUTRANET Project Leader,
     Aalborg University, Denmark

0930 Overview of the Scotland-rest of UK road haulage sector
     Phil Flanders, Scotland and N. Ireland Director, Road haulage Association

0950 Motorways of the Sea case studies and EU policy
     Professor Alf Baird, Head Maritime Research Group, Napier University TRi

1010 Developments in port facilities and logistics capabilities
     Duncan Gray, Forth Ports plc

1030 UK Waterborne and Freight Facilities Grant Schemes
     David Eaglesham, Transport Division, Scottish Executive

1040 Coffee Break

1100 Workshop Question 1
     Technical, operational and organisational requirements for an effective UK Motorway of the Sea

     Workshop Question 2
     Implementation and funding requirements for a UK Motorway of the Sea

1230 Buffet Lunch

End of Programme
ANNEX II

List of Attendees

Mark Robotham, Chair of CILT Maritime Forum/Marine Consultant
David Reid, Chartered Institute of Logistics & Transport (CILT)
Alf Baird, Napier University
Peter Cooney, V Ships (apologies)
Phil Flanders, Road Haulage Association
Gavin Roser, Pantrak (apologies)
David Eaglesham, Scottish Executive
Maurice McGuinness, Forth Ports plc
Yannis Criticos, Superfast Ferries (apologies)
A. Malcolm, W H Malcolm
Duncan Gray, Forth Ports plc
Jorgen Kristiansen, Aalborg University
Roberto Prever, NAOS Design/Visentini Shipyard
Per Fagerlund, NAOS Design (apologies)
Derek Howie, Business Development Manager, ARR-Craib Transport
Murray Prentice, JBT Transport
Clive Marchant, Heriot-Watt University
Robin Dickeson, Society of Motor Manufacturers & Traders
Alan McKinnon, Heriot-Watt University (apologies)