Conference Proceedings

European ShortSea Congress
Dublin Castle
Ireland
24-25 June 2008

Trends, Developments and Opportunities for Bulk and Unitised Short Sea Shipping

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Recognising the importance of European Shortsea Shipping, the Irish Maritime Development Office (IMDO) together with Navigate Conferences, hosted the 2008 European Shortsea Congress in Dublin. Shortsea shipping is an important mode of cargo transportation within Europe as more than 2 billion tonnes of freight is moved by Shortsea, which accounts for over 60% of all European freight movements. Acknowledged experts presenting at the conference described today's industry by rehearsing current and likely trends and drawing out future trade possibilities and identifying opportunities going forward. The conference program provided examination of the synergies that can be achieved through efficient communication, co-operation and collaboration with other transport modes in the objective of supply chain optimization.

Key Conference Theme

The European ShortSea Congress had five central themes addressing current pertinent issues as outlined below:

1. Trends and Opportunities

Provided in depth analysis of:

- current freight movements by cargo and by mode,
- new and growth cargoes
- potential and drivers for modal shift
- changing cargo sources
- emerging Shortsea trade patterns

2. Integration and Intermodality

Investigated the potential for:

- greater integration with road, rail and inland transport
- Transhipment issues and efficient multimodal supply chains

3. What the Customer Wants

Provided insights in to and investigated:

- the needs and requirements of the transport buyer
- the changing role of the intermediary
- the associated opportunities and obstacles

4. Ports and Terminals

- what makes a port friendly
- the growing importance of port based distribution centres and efficient hinterland connections
- transhipment issues and new terminal developments

5. Emerging Issues

- the latest political legislative developments
- the growth of financing options for short sea
- legal pitfalls
- promoting the sector

Day 1: Location: Dublin Castle

Conference Chairman: Chris Bourne
Executive Director European Liner Affairs Association

Welcome and Keynote Address: Julie O' Neill. Secretary General of the Department of Transport

Core issues raised by the Secretary General in the keynote address included the current and rapid increase in the price of oil and the pressure it places on companies trying to absorb such oil hikes while endeavouring to remain competitive. Price hikes, especially fuel prices (and to a degree agro/grain prices), could potentially act as a catalyst that may make previous subsequent modes of fuel disregarded as uneconomical, economical.

The Secretary discussed the issue of climate change and how transport can both effect and minimize the effects of climate change and she also made comment on the recent returned no vote on the Lisbon Agenda. In summarizing, the Secretary passed comment that although Ireland is experiencing a difficult period in terms of European policy and the economy, Ireland (and Europe) of 2008 is in a better position of understanding of its own competitive and economic position than of the Ireland of the 1980's. The future for Ireland and Europe will be challenging.

Session 1: Trends and Opportunities

Global Freight Flows and Their Affect on the Shortsea Markets
Nigel Gardiner, Managing Director, Drewry Shipping Consultants.

Mr Gardiner from Drewry Shipping Consultants presented a paper on global freight flows and their subsequent affects on shortsea market. He provided detail on growth in world trade, commodities and regional perspectives, seaborne trades and flows in the fleet and opportunities for short sea.

In 2007 world trade grew by 5.5%. Intra regional trade between North America, Europe and Asia equalled 23% of world trade. However, European intra regional trade equalled 31.4%. In 2006 world trade was 15 billion tonnes of which 2% was air, 34% road/rail and inland and 64% was catered for by sea transportation. In 2007, world seaborne liquid bulk equalled 3,881 million tonnes, of which European oil imports were over 13,461 thousand bpd and liquid bulk was 50% of the total short sea trade in Europe. In 2007, world seaborne container trade was 1,272 million tonnes, specifically Western European container movements registered at 91,443 TEU and containers were 10.5% of total short sea in Europe. In the European dry bulk trade (in 2007), world dry bulk trade was a total of 2,964 million tonnes. Europe accounts for 18% of global trade in major bulk while dry bulk represents 20% of the total short sea trade in Europe.

Europe has the largest volume of intra-regional trade, absolute trade volumes will continue to rise within Europe, the world commercial fleet continues to expand, growth in ship size in some sectors and trade patterns will create additional demands for short sea movements and additional demand for feeder type ships. Mr. Gardiner's presentation concentrated on the here and now as opposed to many shipping consultants core concern, which are future and expected trends.

European Freight Flows and Current Shortsea Trends
Mike Garratt, Managing Director, MDS Transport Ltd.

Mike Garratt discussed specifically European freight flows and current shortsea trends. At present there is approximately 10 billion tonnes of cargo lifted per annum across Europe incorporating all modes. Overall Mr. Garratt commented that the growth in the short sea sector was modest with an increase from 896 billion tonnes in 2005 to 901 billion in 2006 (figures represent the EU 15).

Northern European ports (i.e. within the EU 15) are showing the most growth and growth is highest where deep sea feeder container and short ferry crossings dominate. For viable SSS non bulk services would need to offer frequency in order to be competitive which depends upon volumes being available on 'region-region' basis and higher oil prices will extend the viable hinterlands of each port.

Solution mentioned would be volume consolidation either by transhipment or the use of rail to concentrate cargo on key regional ports or use of multi-porting to combine several regional flows on one ship. Potential opportunities are the bulk liquid sector if pipelines are not available, dry bulk cargo where origins and destination are waterside and unitised cargo over long haul in which rail is uncompetitive. For SSS a high service frequency is essential to achieve critical mass; however co-operation between lines may be essential but could be deemed anti-competitive within a European legislative framework.

Future Opportunities and Cargoes
Fred Doll, Managing Director, Doll Shipping Consultancy.

Mr. Doll presented on future opportunities and cargos in biofuels, vegoils and steel. Vegoils represent about 34% of the chemical tanker trade and the use of such oils has strong growth due to its application with food oleochemcial use. By 2015 EU biofuel consumption will reach 30mtpy, by 2030 this will increase to 55mtpy and generate growth in short haul and transhipment requirements. The cargo is been driven by expansion of the population, increase in income, improvement in health and diet, strong government support and high fuel prices.

Vegoil trade grew from 33mt in 2000 to 55mt in 2007, with a forecast growth to 59mt in 2008. European imports of vegoil increased from 5.7mt in 2001 to 9.9mt in 2006, sunflower oil imports have grown from 0.2mt in 2001 to 1.3mt in 2006-2008. The positive affects of transhipment for EU palm oil imports, of which, 30-50% appears seaborne and this proportion should grow as long haul shipments and overall requirements grow.

For the EU steel products trade, sector consolidation is providing trading opportunities coupled with steel prices and high demand. EU-27 steel production in 2002-2007 was up by 17mt to 210 mt (1.8% average annual growth) and EU-27 steel product exports were up 7%. Estimated EU-EU seaborne steel export product trade has increased from 51.6mt in 2002 to 72mt in 2007.

Session 2: Integration and Intermodality

Effective Multimodal Supply Chains
Professor John Mangan, Director of Logistics, University of Hull.

Professor Mangan presented on effective multimodal supply chains specifically addressing supply chain interaction, the role of ports, shipping and future challenges.

It is supply chains that compete as opposed to products and firms. The role of ports and shipping is vital to successful supply chain competitiveness and thus there efficiency and capabilities are paramount. The World Bank Reform Tool Kit identified 5 key areas that are predicted to change dramatically in the 21st century. These are intensification of global competition, new and developing technology, change in distribution patterns, the environment, safety and security concerns and the shifting of bargaining power due to realignment and consolidation.

Ports and shipping will be affected by the changes and trends emerging individually within the port sector. Growing issues concerning ports are changes in port ownership and the emergence of global port operators, increased competition between port ranges and the development of port clusters and port centric logistics (e.g. the Asda Wal-Mart type distribution centre at Teesport). Prof. Mangan also discussed future trends that will impact on further integration of the supply chain.

How the EU can Assist
Patrick Norroy, Principle Administrator, DG TREN. Presented by Julio de la Cuava Aleu

Mr. de la Cueva Aleu began his presentation by highlighting that Intra-EU freight in maritime transport grew by 1.0% over the 2005-2006 period, while freight road transport grew by 4.9%. It was also highlighted that SSS had a number of problem areas namely; insufficient integration in the intermodal chain, administrative and operational complexity, ports efficiency, flexibility and transparency, congestion in ports and hinterland connections, quality staff and fuel prices. Mr de la Cueva discussed that improvements are needed in upgrading new maritime services linking MOS ports, hinterland transport services, administration simplification, intermodal tracking and tracing of cargo, measures for safety, security, energy efficiency and sustainable transport modes. The European Maritime Transport space without barriers is a proposal that would enable national authorities to track and trace vessel movements with technologies like AIS, LRIT or SafeSeaNet. Administrative formalities and controls can thus be abolished for vessels sailing between EU ports and carrying EU goods, as it has been the case for land transport since 1993. A public consultation on the European Maritime Transport Space without Barriers has been launched on 18 October in view to propose EU legislation in 2008.

The WESTMOS Project.
Capt. Michael McCarthy, Commercial Manager, Port of Cork Company.

Capt. McCarthy discussed the WESTMOS (Western Europe Sea Transport & Motorway of the Sea) project which addresses the motorway of the sea from Ireland to Spain. The study, commissioned by the ports of Cork and Gijon to assess the commercial feasibility of new unitised services between Northern Spain, Western France and Ireland/UK.

The objective is to determine and to present a cost effective, energy-efficient and climate-friendly alternative to extending motorway networks on land. Factors driving the project are fuel prices, toll charges, severe road congestion in UK, Ireland and France, rising cost of security, shortage of truck drivers and the increased efficiencies in implementing the working time directive. Ireland uses the UK as land-bridge to the continent with 1.7 million ro-ro freight trailers handled through the east coast of Ireland and Northern Ireland in 2007. The balance is predominantly land-bridge cargo with estimates of 60-70% to and from the UK market.

In conclusion a strong case can be made to attract EU and national support to a new service between Spain and Ireland. A direct ro-pax service would be best but this would depend on securing a high market share and service via the UK. The next stage of the project is to develop a proposal with the support of the EU and appropriate national governments to promote a direct service between Ireland and Spain and finally put the proposal out to competitive tender.

Optimum Integration with Road, Rail and Inland Shipping
Mark Copsey, General Manager Intra European Trade, MacAndrews Ltd.

Mr. Copsey presented a case study on a modal shift which addresses the benefits of transporting fresh produce from Spain to England and Ireland. The objective is to provide a seaborne alternative from Spain to the UK/Ireland at a rate per pallet no more than cost levels by road and thus provide a complimentary seaborne solution to the existing reefer trucks moving overland from S.E. Spain to UK and Eire.

The current market is in excess of 80,000 trucks p.a. driving 2000 kms across Spain and France and 500kms in UK/Ireland occupying a 3.5 day transit guarantee to the supermarkets. This produces four tonnes of carbon emissions per lorry trip. Issues driving the investigation of an alternative option are the working hour's directive to be implemented reducing drivers' hours, road transport costs will have to increase, current and pending EU policy on motorways of the sea and the ongoing green and environmental issues. The alternative option is a route incorporating a 4 day transit door Murcia to UK and 5 day transit door Murcia to deliver to Dublin carrying 40' and 45' pallets.

The case study proved that it is increasingly more economical to transport by sea. However it requires commitment from supermarkets which so far has not been successful. Currently and economically it would be worth it, however supermarkets would have to make 30% commitment to fresh produce and it would produce a transit time of 4.5 days to England and Ireland.

Session 3: Stream 1: Bulk Cargoes

Chairman: Mr. Glenn Murphy

Growth Opportunity – Metal Recycling and the Shortsea Shipping Market
John Dundon, Shipbroker, Mullock & Son Ltd

The presentation concentrated on some of the facts and figures in relation to the dry bulk market, scrap metal, ports and the volume actually being shipped. The presentation also focused on the growth pattern in ships which can be an indication for demand opportunities with a particular cargo type.

In 2001 15,000tons of scrap metal was shipped from Ireland – via Spain/Portugal which increased to 222,000tons in 2006. Specifically addressing Irish ports, in Dundalk in 2003 there were no cargo throughput; however for 2008 there is an estimated 100,000 tons of scrap metal expected. In 2001 there was 150,000tons of scrap metal transported to Irish Steel in Cork by road, 205,000tons transported by sea ex Belfast and 74,664tons transported by sea ex Dublin. In 2001 Irish steel closed its doors. The industry has seen divergence and changes in port patterns in

2008 and the ports of Dublin and Belfast ship sizes have increased from 3,000 DWT to 7,000DWT.

Some of the benefits derived from the scrap metal bulk shipping trade include:

- the costs and time effective access to the export market via sea route and Irish ports
- freight tons with valuable backhaul business reducing
- environmental advantages such as waste and landfill reduction
- concession to Motorways of the Sea by conserving fuel and reducing traffic congestion

In discussing some of reasons for the growth of scrap metal bulk shipping Mr. Dundon made reference to the ELV Directive, WEEE Directive, improvements in the segregation by waste companies and increase in the world demand for steel as seen in the case example of China.

What the Customer Wants – Dry Bulk
Clive Kessell, Logistics Manager, IMERYS Pigments for Paper

Imerys makes a vast majority of its products with raw material coming from its own mines and quarries located in Europe, North and South America, Asia and Africa. Expertise in large-scale mining, conversion and logistics guarantees the same quality standards worldwide as Imerys implements effective, competitive logistics. Whether by sea, rail or road transport, reliable deliveries are a core concern for every customer.

What the customer wants in terms of vessels will be a modern box shape, with two moveable bulkheads to allow up to three grades of cargo to be shipped. Kaolin vessels are normally in the 2,000 to 8,000 tonne range and marble vessels are normally in the 5,000 to 13,000 tonne range and for Baltic cargoes, Ice Class 1a is required. The average coaster size is getting bigger, with most new builds being 4,000 mts or greater. However, there is still a demand for the smaller vessels when the port or storage silos limit vessel size. Contract partners need to be competitive on price, provide good quality of service and have the backing of a good fleet that can meet importer vessels. All vessels are inspected prior to loading by an independent surveyor as poor quality holds will result in the request to clean the vessel to a suitable standard or result in the vessel being rejected. Imerys operates a tight quality control system on each vessel chartered and scores are accumulated over the contract period and minimum standard must be maintained to renew a contract. Historically, about 10% of owners fail to meet the minimum standard required.

The Intermediaries Perspective
Mark Harrison, Director, HC Shipping & Chartering Ltd

The presentation discussed the intermediate perspective trends in short sea shipping specifically looking at the short sea index from 2003-2007 which is currently reflecting high levels seen in 2004. The driving of this upward cycle is due to a steady rise in short sea shipping patterns. A 10 year pattern should be repeated in most of the 5 main European routes as costs are increasing consistently as fuel prices are having an impact.

In 2007 HC Shipbrokers fixed 844 vessels in total providing 2.326m tonnes. Also in 2007 with vessel less then 3,000m tonnes HC Shipbrokers fixed 545 vessels providing 1.31m tons in total. The volume moves in restricted Irish port in 2007 included Dundalk at 419 thou tonnes, Kinsale at 94 thou tonnes and Youghal at 2,152 thou tonnes providing a total of 2665 thou tonnes. In terms of supply increasing to meet demand trends show that new build orders are increasing with 35 new builds on ship yard books with a 2008 delivery scheduled of 1 <2,500 DWT and 2008 a delivery scheduled of 12 2,500–3,000 DWT. The days of smaller coaster ships under 2,000 DWT with a life span of 15 years are numbered, however 2,000-3,000 DWT is still possible. Currently 1000-3000 DWT average age is currently 32.90 years. Therefore, Mr Harrison suggests that there are two possible conclusions, firstly, that the days of the smaller coasters are numbered or that at some point the fleet must be renewed

Obstacles and Opportunities
Tim Lowry, Managing Director, Coastal Bulk Shipping Ltd

Coastal Bulk Shipping operates 12 small British flag bulk carriers. Coastal concentrates on bulk and project cargoes by sea, river and canal throughout NW Europe on term contracts and spot voyages with a cargo size 1000 to 2000 tonnes. Some of the bulk cargoes they ship to Ireland include fertilisers, magnesite, pipes, project cargo, soya beans, steel coils, vermiculite and wheat.

The tonnage supply for Europe with 1000-2000 dwt bulk carriers is 652 ships with 980k tonnes dwt, with an average age of 31 years, and 129 ships which are 40 years with a total of 5 ships on order. The barriers of entry to the market consist of very high regulation, expertise and knowledge, crew shortages, strict regulations with port state control and high insurance. Certain obstacles to growth are increased freight rates, inefficient port work practices and high port costs and a lack of understanding about the water borne option. Agenda to solve restricted growth would be more ships, greater education and understanding, a level playing field with no grants or subsidies to distort the market and to penalise road haulage within the context that the polluter pays. Mr. Lowry argues that such described issues are contrary to the expected perception of obstacles to growth, such as high commodity prices and high fuels costs.

Session 3: Stream 2: Unitised Cargoes

Chairman: Dr Andrew Traill

What the Customers Wants – RoRo
Joe Grealy, Director of Strategic Industry Relations, Thermo King

A customer wants dependable shipping routes with a regular sailing frequency and a schedule to get goods to markets on time. Cargoes that require temperature controlled transportation require the maintenance of the cold chain with load protection and public health and safety.

Commodities with high value loads like pharmaceuticals, for example, are transported with different types of equipment such accompanied vehicles, unaccompanied vehicles and multi-modal boxes. Accompanied traffic is least demanding as the driver is able to act as a monitor while unaccompanied traffic needs constant temperature control. The ability to run off a diesel engine or an electrical supply on board and at port and phase correction to ensure correct rotation of components are now standard. Inter modal boxes are a cross between a marine container and a road trailer which is suitable for road, sea and rail. They have the ability to run on an engine or an electric power and there are power sources at port and on board. The use of multi-modal boxes has been driven by Marco Polo incentives and the corporate image of corporate responsibility for their carbon footprint. There is a need for cost efficient schedules to key markets and a more tailored service for the transport industry.

Obstacles and Opportunities
Michael Connolly, Sales Manager, DFDS

In examining how customer service can be improved Mr. Connolly discusses issues such as weight restriction across Europe. One of the problems is that you can deliver a container that's the correct weight in the start/end country; however, it breaks the weight restrictions on the countries it travels through. It is also the customer's responsibility to securely and safely load the cargo in the container, which is not always a reality. Can the cost of not securing the cargo be passed on to the customer? These obstacles need to be addressed and it must not always be the expected responsibility of the service providers to deliver solutions and absorb the cost. In the future it will only improve through co-operation of all parties involved in the supply chain along with the support and involvement from trade associations and government bodies.

The customer needs to be much more aware of the industry and realise the full cost of the transport supply chain and the effects of there lack of responsibility in certain instances. Best practice needs to be adopted. One of the reasons for the current situation in the lack of responsibility of the customer is that the short sea shipping industry in Ireland was not prepared for the boom. Industry spent large amounts of money (above the norm) to cope with the demands which left expensive warehouses, obsolete equipment, and vessels with spare capacity. The new roads are coming on stream now and the peak times are gone. We must use this time to take stock and review and that this is the time to learn the lessons and show our EU colleagues both the successes and pitfalls of sharp economic growth.

Shortsea Opportunities in the Baltic Region
Bill Burns, Maritime Consultant

Mr. Burns addressed the conference of delegates about the short sea opportunities in the Baltic Region. Mr Burns discussed the market in terms of its growth history, forecasts for the market and ship size. For Finland, Sweden and Denmark there has been a consistent increase in TEU while the Eastern Baltic States (specifically Poland, Lithuania, Latvia, Estonian and Russia) saw a more rapid increase since 2003. For the Baltic Scandinavia countries by 2020 intra European trade is expected to increase to over 2,000 TEU, direct deepsea to 2,500 TEU and feedered at just over 7,000 TEU. For the Baltic Eastern states by 2020 intra European is expected to hit 5,000 TEU, direct deepsea at 7,000 TEU with feedered at 14,000 TEU.

In terms of ship size development, for the average vessel at the end of 2003 the size was 500 TEU and by the end of 2007 the average size was 750 TEU with expected levels in 2020 to be 12,500 TEU. For the larger vessel by the end of 2003 the average size of a lager vessel was 750TEU, by the end of 2007 it was 12,500TEU, however it is expected by 2020 to be 17,500 TEU. In looking at western Mediterranean regional feeder demand in a worst and best case scenario, in 2020 it is expected that the worst case could be 13,000 TEU and best case at 16,000TEU. In concluding the Baltic market has expanded rapidly since 2000 and the rapid expansion has been mainly dominated by feedered and short sea traffic. And to finalise it is expected that there will be future market growth

Shortsea XML
Mike Elsom, Director, Navigate and Shortsea XML Project.

Mr Elsom presented on a project called Shortsea XML which is a series of standardised messages, for door-to-door shortsea focused logistics chains sponsored under Marco Polo.

The standard has been approved by the UN/CEFACT and it uses a common technology platform such as XML. Benefits of XML technology is that it is already embedded within most new software. It's more flexible than other message standards such as EDIFACT, it's easier to integrate with existing applications and can be easily transferred to other formats. Project deliverables include documented standardised messages, booking, scheduling, operation and invoicing, and implementation in terms of proof of the concept. Proof would have to consist of implementation in live situations involving real companies and the implement of message exchange. The derived benefits are expected to simplify and streamline administrative processes, cut costs, reduce administrative errors, improve transparency, improve customer service and save man hours and free-up staff.

Current project status of activities after September 2008; SMDG and UN/CEFACT will maintain the standards, SMDG message standards for container lines and terminals, implementation will continue and the SPC's will continue to promote the project.