Venice

C. & D. Committee
Short Sea Shipping Report

10th October 2012
Le ultime ore di Venezia

È fosco l'aere, é l'onda muta!...
ed io sul tacito Veron seduto,
in solitaria malinconia
ti guardo e lagrimo,
Venezia mia!

Sui rotti nugoli dell'occidente il raggio perdesi
del sol morente, e mesto sibila per l'aria bruna l'ultimo gemito della laguna.

Passa una gondola della città:
- Ehi, della gondola, qual novità?
- Il morbo infuria il pan ci manca, sul ponte sventola bandiera banca!
Although there is no worldwide consensus on the definition of SSS, the definition given from the US Maritime Administration (MARAD), ‘as a form of commercial waterborne transportation that does not cross an ocean and utilizes inland and coastal waterways to move commercial freight’, is the most widely accepted.
Five countries: different perspectives
- one objective: to move cargo by sea

After the European Commission released its Communication on the Common Transport Policy in December 1992, Short Sea Shipping has promoted so many debates to the extent that other regions of the world such as United States / Canada, Australia, Asia, New Zealand are considering it at a policy level as well.
In recent decades, the European Union (EU) has been striving to create a strong market for short sea shipping to shift freight movements away from overland transport.

Greater use of short sea shipping and inland waterways is aimed to support Europe’s goals to realize an **80 percent decrease of CO2 emissions from 1990 levels by 2050**; the transport sector is responsible for about one-quarter of EU’s greenhouse gas emissions. According to recent studies, the total external costs of inland navigation (in terms of accidents, congestion, noise emissions, air pollution and other environmental impacts) are one seventh of those for road transport.

Intra-EU shipping programs aimed to promote and fund short sea shipping include the Marco Polo Program for the European Union and bordering countries and the Freight Facilities Grant within the United Kingdom.
The Short Sea Index is based on the average freight rates for five routes, ECUK/N. Spain, ECUK/ARAG, Lower Baltic/ARAG, French Bay/ECUK and WCUK/East Med in 3000/4000 mts deadweight and bunker prices in USD basis MGO delivery ARAG range.

Source: H.C. Shipping & Chartering Ltd, Hull
European Short Sea Market

- Baltic Sea and North Sea Routes
- Black Sea
- Mediterranean routes
This graph tracks average freight rates for a general short sea cargo of 3,000 mt shipped from the Baltic States to the ARA region.

Source: BMTI
Black Sea

General cargo 3-5,000mt from Azov Sea to Marmara region

Source: BMTI
Mediterranean Market

This tracks average freight rates for a general short sea cargo of 3-5,000mt shipped from Black Sea to North Africa.

Source: BMTI
Grain Freight Rates 2011-12

Source: BMTI
Short sea shipping networks in China, Japan, and Korea are described in a study for the Asia-Pacific Economic Cooperation (APEC) group (2007). It was found that Asia in general was behind Europe in integrating short sea shipping into the door-to-door intermodal supply chain but that SSS is a significant transport mode that is gaining ground. Three national hubs are currently defined by this network, Qingdao, Shanghai, and Hong Kong. Hong Kong is key because of its “established trading networks, legal system, ease of communications, and efficient support services.”

Japan, being an island nation, has a thriving SSS industry. In the mid-2000’s there were 112 ports connected by a network of 23 routes serviced by 48 operators of 101 ships going on approximately 196 sailings per week. Vessels in Japan are typically roll on/roll off (Ro/Ro) and conventional ships plus ferries that can all access small ports and are “handy to accommodate local niche cargo demand.” As might be expected in a densely-populated country where land is at a premium, cost is often the deciding factor in using the SSS network instead of the road network. An interesting fact regarding Japan’s SSS network is that in-country container ships from the large ports rarely drop anchor at the smaller container ports. These smaller ports are well-served by feeder ships moving containers directly from Korea and China.
Basic period. CBFI took January 2000 as the basic period with the basic index of 1,000 points.
The US coastal and Great Lakes shipping industry includes about 500 companies with combined annual revenue of about $8 billion.

Coastal ("coastwise") shipping involves the freight transport of cargo within 20 miles of the Atlantic, Pacific, and Gulf Coasts; between the US mainland and Puerto Rico, Alaska, Hawaii, and other US Pacific Islands; and between US coasts by way of the Panama Canal.

Great Lakes ("lakewise") shipping is the transport of freight among the five US Great Lakes and along the Saint Lawrence Seaway System.
Figure 3: Map of Short Sea Shipping Routes in the United States

America’s Marine Highway Corridors

Source: http://www.marad.dot.gov/ships_shipping_landing_page/mhi_home/mhi_home.htm
Major products shipped along US coasts include refined petroleum products, crude oil, and coal. A fleet of 8,000 US-built and -owned coastal vessels annually ships around 200 million tons of cargo along the Gulf, Atlantic, and Pacific Coasts. Around 70 percent of all ton-mile trade is bulk petroleum. Common carriers include dry cargo barges, towboats, roll-on/roll-off vessels for unloading wheeled cargo, and liquid tanker barges. Transport modes are evenly split between barge traffic and self-propelled vessels.

Major products shipped among the Great Lakes include iron ore, coal, limestone, cement, scrap metal, and agricultural products. Nearly half of all bulk cargo shipped is used in the steel industry. Vessels transport 125 million tons of cargo a year via the Great Lakes and Saint Lawrence Seaway, according to the Lake Carriers’ Association. The Great Lakes fleet is composed primarily of self-unloading dry bulk carriers and dry cargo barges, or “lakers,” and tankers, tank barges, and towboats. Self-propelled vessels transport 80 percent of the total volume of shipments, according to the Transportation Institute. Cold weather shuts down Great Lakes transportation January through March.
Major companies include Horizon Lines, Matson Navigation, American Steamship Company, and Rand Logistics.

The industry is highly concentrated: the 50 largest companies account for over 80 percent of industry revenue.
All vessels travelling to and from domestic ports operate under a federal cabotage law known as the Jones Act, which requires that all vessels and towboats transporting cargo among US ports be US-built and -registered. Dredging in US waters must be by a US-built and -documented dredge. No foreign ships are allowed to travel among US ports, and at least 75 percent of a ship's crew members and corporate owners must be US citizens. The US DOT's Maritime Administration (MARAD) oversees the industry's compliance to Jones Act protections. MARAD also mobilizes the Merchant Marine should US-owned vessels be necessary to protect US waters.

The output of US water transportation services, which include coastal and great lakes shipping, is forecast to grow at an annual compounded rate of 4 percent between 2012 and 2015.

Data Published: March 2012
Coastal Dependence on Petroleum - US coastwise trade fell 24 percent between 2004 and 2009, largely due to declining petroleum shipments. Domestic crude oil production has declined about 40 percent since its peak in 1970. Petroleum companies off the Gulf Coast struggle to compete against Middle East oil. New oil pipelines from Alaska have reduced demand for Pacific Coast petroleum shipping. Hurricanes Rita and Katrina raised new concerns about the long-term health of offshore petroleum shipping.

Great Lakes Shipping Depends on Steel - Coal, iron ore, and limestone, three key commodities in steel critical Issues manufacture, make up a large portion of the total traffic transported on the Great Lakes. The Great Lakes shipping industry depends on three industries: steel, utilities, and construction, which depend heavily on the health of the US economy. Economic slowdowns or competition from foreign steel manufacturers could greatly impact industry profitability.
Brazil

Brazil has a transport system with little presence of intermodality and use of Short-Sea Shipping. Nevertheless, these are goals for Brazilian waterborne transportation matrix, which is expected to exceed 13% going to 25% in 2025. Currently, Brazilian transportation matrix isn’t balanced surpassing that of other countries in the use of the highway, where approximately 63% of the total cargo is transported.

According to Brazilian law, it is considered as Short-Sea Shipping (Law 10,893/04): “a coasting navigation that is held between Brazilian ports, using exclusively the sea or the sea and the interior”. A broader concept, however, is presented by CGEE (2009) for merchant shipping, based on Regulation for Maritime Traffic (RTM, 1992), classifying SSS as:

- **Great Cabotage**—held at the merchant shipping between Brazilian ports and or harbors of the Atlantic coast of South America, West Indies (the Caribbean) and the East coast of Central America, excluding the ports of Puerto Rico and the Virgin Islands;
- **Small Cabotage**—held between Brazilian ports, the vessel not moving away for more than 20 nautical miles from the coast, or 37.04 km and making large-scale ports whose distance does not exceed 400 nautical miles (740.8 km).
Year after year, Brazilian SSS has registered some growth, but in quite short steps. It may be noted (Figure 1) the small growth in the use of SSS in Brazil, between 1998 and 2010.
In fact, the percentage share of SSS in the cargo movement in Brazil fails to reach the level of 23%, and by contrast often shows declines, such as the 4% reduction between 1999 and 2009 (Figure 2).
Thus, several barriers to short sea shipping in the maritime sector may be listed as follows: observed gaps in regulatory issues; lack of Government incentives; increased rates in ports; fleets with aged vessels; the need for more modern equipment in various Brazilian ports; and new investments for the integration of the transport logistics chain.

One of the other problems faced by coastal shipping is the imbalance that exists in the flow of cargo between the regions of the country. The irregular distribution of goods is also caused by the disparity between modes of transport, especially because most cargo is transported by road, with roughly a 63% stake in the array of cargo transportation modes. Studies for the National Logistics and Transport - PNLT claim that the goal of participation of water transport in Brazil must overcome the mark of 25% in the transport matrix, by 2025. One way to improve this situation would be to provide a different vision for the use of short sea shipping, with appreciation of the various spheres of society and, therefore, as part of intermodal transport chains for cargo movement.
The concept of SSS can be expanded, not only the one that has its origin and destination within the national territory (Small Cabotage), it can become the integration of transport logistics chain.

Among the main advantages of developing a new model for Brazilian SSS, there are: managing door-to-door cargo integrity, security, agility in customer delivery, competitive cost, integration across all Brazilian regions, using containers, based on a predictable transportation with weekly departures and arrivals.

In addition, reduced use of road transportation, reduced congestion in the port access, lower pollutant emissions in port areas and the consequent decrease in the levels of greenhouse gas emissions in the country. Also, with the entry of new vessels to serve domestic market, through the growth of the Brazilian shipbuilding industry, the trend is that the volume of cargo transported (demand) in SSS earns greater impetus in the coming years.
If this cargo has been extracted from traffic that is distant from ports, small businesses that do not have regularity in their shipments and market of cargo split, the potential market for SSS not served by this mode, in 2010, would have amounted to 1.2 million TEUs.

It is estimated that companies providing SSS in Brazil handled 348,000 TEUs in 2010, so 23% of the total potential SSS market for the country. This indicates that there is a large market, about three times the current level, not yet met, or as yet undeveloped, which presents opportunities to capture market share from road transportation. Obviously, this kind of analysis ignores the potential development caused by the provision of a new transport system, but it serves as a starting point for an initial estimate such as the 25% that Brazil’s government intends to reach with SSS in a few years time, according to the Transportation and Logistics National Plan - PNLT.
## General comments on SSS from USA

### Strengths
- High fuel efficiency (per ton-mile of cargo), economies of scale
- Environmental benefits: fewer emissions, less air pollution
- Highway congestion mitigation
- Road safety improvement
- Low infrastructure costs, port investment
- Easy to expand

### Weaknesses
- Additional nodes (ports) in cargo flows
- Terminal handling costs
- Low vessel speed
- Image problem, shippers’ reluctance

### Opportunities
- Container trade growth
- MARAD and EU promotional policies
- Intermodal integration, door-to-door, just-in-time practices, modern logistics
- Truck drivers’ shortage
- Increasing fuel prices, alliances with trucking industry and port authorities
- Alleviation of port capacity problems, i.e. feederings

### Threats
- Port fees, Harbour Maintenance Tax
- More paperwork and bureaucracy
- High vessel capital costs (Jones Act)
- More sea traffic strain at ports, incompatible port terminals
- Rail competition
- High levels of SO₂ in marine fuel

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**Fulvio Carlini - Short Sea Shipping Report**

10/16/2012
Australia
Australia

- Tax reforms
  - Remove barriers to investment in Australian shipping;
  - Foster global competitiveness;
- Strengthen and simplify regulatory framework
  - Transparent licensing regime;
- Establishment of a Second Register, AISR
- Progress maritime skills and training;
The End

Probably the sole option for shipowners and shipbrokers future !!!!