

## **Hinterland Connections of Seaports**

*Session "Port operations and management: a key factor in the supply chain management" (18 September 2008, 09:00 – 13:00)*

**Moderator: Mr. Emre DINCER**

**Maritime Expert, Undersecretariat for Maritime Affairs, Prime Ministry, Turkey**

The moderator noted in his introduction that the session aims to exchange views and discuss the importance of effective functioning and operations of various seaport services and their role in ensuring efficient and smooth transport supply chain operations.

Ports were recognized as the springboards for economic development of the hinterland. On this basis the related research and development activity focused on the ability of ports to carry out their functions of accommodating ships and service other modes of transport effectively and efficiently. Contemporary developments in transportation however dictate that the emphasis should be on the ability of ports to fulfil a new role in the logistics era as parts of integrated global supply chain systems.

Ports nowadays play an important role as key nodes in the supply chain. In this role, the port is considered as a part of a cluster of organizations in which different logistics and transport operators are involved in bringing value to the final consumers. In order to be successful, such channels need to achieve a higher degree of coordination and cooperation. The determination of the parameters that encompass the extent of integration of ports/terminals in global supply chains has, therefore, become of great importance for ports.

To understand the new roles of the ports in logistics we have to consider a number of important changes in the real world. These changes started with easier custom procedures and operations so that goods could move across borders easier and faster.

This has opened new markets for all kinds of goods worldwide. Consumers demand everywhere better goods at low prices.

The third change is the environment and security. Here we have to turn ourselves from the world at large to the European Commission, which has an active policy to increase the use of sea mode via its Short Sea Shipping Concept.

To assess the role of ports in the supply chain management we need to consider the "use of technology for data sharing, availability of shipping lines, value added

services, transport mode integration, inland transport providers, channel integration practices and performance” parameters.

**Mr. Bulent Sonmez**

Maritime Expert, Undersecretariat for Maritime Affairs, Prime Ministry, Turkey

Mr. Sonmez presented a video illustrating current cargo operations and hinterland connections.

**Prof. Georgios GIANNOPOULOS**

Director, Hellenic Institute of Transport, Aristotle University, Thessaloniki, Greece

Prof. Giannopoulos pointed out in his presentation that desirable port attributes include increasing throughput capacity, increasing efficiency of transport chains, and increasing global logistics outreach.

He also presented his reflections on the contribution of research and development, Greece port community system and innovation technologies.

Further, Prof. Giannopoulos argued that Crete, given its geographical position, could become a leading centre of transshipment services.

**Mr. Ronnie DAELMAN**

Freight Director, P&O Ferries, Dover, United Kingdom

Mr. Daelman described briefly the existing road congestion problem and proposed short, medium and long term solutions.

In the short term one could increase motorway capacity by 30% through legislative measures that encourage LGV night driving and night delivery opportunities. It should be also possible to reduce empty mileage through better use of technology and bigger trucks.

In the medium term, authorities could reduce permissible “road distance” in Europe between the origin (producer or port) and end user in phases.

In the long term, Mr. Daelman discussed the potential of innovations such as ground controlled, sun powered airship, hybrid hovercraft vehicles and underground conveyor belt networks.

**Mr. Arif DAVRAN**

Deputy Chairman, International Freight Forwarders Association Turkey (UTIKAD), Istanbul, Turkey

Mr. Davran has addressed the following issues:

Ports are the gateways connecting the sea to the land. Today's traders need from them more speed and better quality of service at lower cost. To reach this goal many ports started extending their services with various logistics extras and marketing them.

Politicians are taking decisions that affect seaport activities. Such decisions have sometimes undesirable side effects on internationally and locally important gateway ports. Especially, competition law may have such effects.

The secondary and also important problem is that political decisions taken far away from ports increase the bureaucracy and the big investments needed for faster freight shipments.

A third problem is at the local level. The port working conditions differ across countries in respect to labor unions, social traditions, etc. Some port operators strive to achieve uniform service standards with big worldwide investments. On the other hand political decisions tend to be less useful than planned.

The main target is to forward cargoes to their destinations as fast as possible. However, transport operators find it increasingly difficult to obtain visas. Without the solution of the visa problem, it is impossible to increase the speed of freight transport worldwide.

The EU's efforts to promote "short sea shipping" investments are paying off. This has to be backed up by increased carry capacities. However, in most European countries (unlike in the US) rail investment for passenger (rather than freight) transport predominates.

Also all the recommendations of the European Union for the use of 45' container should be backed up by some financial subsidies. This would result in less movements and higher volumes, time saving and enhanced profitability.

**Ms. Cristiana RACAUTANU;**  
Maritime Port Administration, Costanta, Romania

Ms. Racautanu provided information on the Constanta Port and its new barge terminal which was designed to improve inland navigation capabilities. She also described the inland waterway link (Danube River) between Constanta and central Europe.

Multimodal transport via port of Constanta offers environment friendly and short distance solutions for promoting shipments combining both sea and inland waterway modes with road and rail transport. The Danube navigation and the available canals network can improve the riparian countries' development and attract large quantities of containerized goods.

For goods in transit originated in the Far East and bound for Central Europe the link Danube River – Constanta Port is made via the Danube – Black Sea Canal, offering a transport alternative which is by 4,000 km shorter than competing routes.

At present, only 7 per cent of the Danube transport capacity is used. In order to increase the commercial value of Corridor 7 – the Danube, and European inland waterways system, one should build new bridges, and maintain the Danube depths up to 2.5 meters.

Looking at the Danube River as a reliable transport alternative in the future, a recent study confirms that the benefits of using inland vessels specialized in container transport are important and the environmental impact balance favourable.

Considering this, container lines along Danube must be solutions for transport to the Black Sea for all countries that are crossed by the river, providing an important and efficient option in comparison to the sea connections via Western Europe.

**Mr. Vladimir ERYGIN**

Harbour Master, Maritime Port Administration, Novorossiysk, Russian Federation

Mr. Erygin described activities of a number of Russian ports (Novorossiysk, Tuapse, Taman, Taganrog, Temryuk, Eysk, Kavkaz), using the available statistics. In 2007 the total cargo turnover of Russian seaports reached 30.4 million tons, increasing by 7.2 % over the preceding year. Having mentioned various safety and security projects, he emphasized that all of them aim to improve the ecological situation in the Black Sea.

**Mr. Björn NECKMAN**

Head of Public Affairs, Ports of Stockholm and Representative of the Baltic Sea Organization, Stockholm, Sweden

In his presentation Mr. Neckman mentioned that an optimal hinterland for a Seaport has a core catchment area “near” the port, a large consumer or industrial market, and a spoke system from the port/core catchment area to the periphery.

He emphasized that an attractive seaport offers a critical mass (economy of scale) for the efficient use of resources in the logistics chain and innovations reducing negative environmental effects. Incentives (not meaning subsidies) for efficient and environmental friendly supply chains are a key factor to coop with future challenges.

The interplay between the port and its hinterland will be of utmost importance for a sustainable supply chain. Port management need to further develop skills beyond port business to interact with stakeholders far away from the core business.

In conclusion, the business environment will be characterized by lack of resources and caps on energy consumption and emissions. Economic growth is not necessarily harmful to the environment.

**Ms. G. SANNEN;**

Consultant Strategy and Development, Port of Antwerp, Belgium

Ms. Sannen presented first general information about the Antwerp Port. Afterwards she highlighted the new role of port authorities and key factors for their success.

According to her, 'integration' dominates increasingly the logistics environment. Horizontal integration results in global players and megacarriers, searching for economies of scale, while vertical/functional integration leads to strategic alliances and (terminal) networks. As chains become networks and logistics sites group to become logistics zones, port competition is changing as well. It is not only related to the performance of the port in a narrow sense but includes the integration of the port in broader networks. Individual ports are now connected to several inland corridors by flexible, reliable and cost-effective hinterland links.

Due to the changing nature of port competition, port authorities are forced to move beyond the 'traditional' role of a landlord port. Seaports need to be integrated in the broader supply chain networks, anchoring logistics actors with decision power. The Antwerp Port Authority is adopting a hinterland strategy, based on the 'extended gateway' concept, considering the hinterland as a multimodal network, where bundled flows can be observed as an extension of the (inter)national gateways. Intermodal connectivity, creation of added value within the network and collaboration amongst clustered companies are of utmost importance.

Ms Sonnen concluded that main (gateway) ports need to be integrated effectively into supply chain networks and that port performance in addition to fast, reliable, flexible and cost-friendly intermodal connections with the inland corridors, are the key factors for success.

**Dr. Peter W. DE LANGEN;**

Economist' Corporate Development, Port of Rotterdam and Assistant Professor, Erasmus University Rotterdam, The Netherlands

Dr. de Langen addressed in his presentation the role played by port authorities in the development of efficient hinterland links. He introduced innovative approaches of the Port of Rotterdam to the improvement of hinterland access. Dr. de Langen described the successful participation of the Rotterdam Port authority in a road transport management company, a rail infrastructure management company and the establishment of a fully owned port info link.

**Mr. Jinkun WU;**

President, Ningbo Port Limited Company, Ningbo, China

Mr. Wu presented detailed information about the Ningbo Port. He mentioned that the successful development of container transport of Ningbo Port is related to rapid economic growth of its hinterland, resulting in large quantities of inbound and outbound foreign trade cargo. Currently, the import and export trade areas for the hinterland of the Ningbo Port are mainly the European Union, United States, Southeast Asia and Japan.

Having reviewed the high-quality port operation services provided by the Ningbo Port to its hinterland, Mr. Wu briefly introduced activities of the Port related to the coordination and construction of hinterland transport infrastructure. Development objectives of the Port include the building of an efficient distribution network, the provision of more quality services to customers and an environmentally sustainable expansion of its operations.

**Mr. Hakan ERDOGAN;**

Port Expert, Turkish State Railways, Ankara, Turkey

Mr. Erdogan introduced major container ports of Turkey (Haydarpasa, Ambarlı, Izmir and Mersin.) He emphasized the role of containerization in facilitating global commerce. He stressed that Turkish port authorities are challenged by geography in their efforts to develop hub ports or transshipment ports comparable to major Mediterranean gateways such as Marsaxlokk, Gioia Tauro, and Damietta. However, there are underlying factors that can overcome the physical distance in the choice of a transshipment port such as the port's inherent centrality and operational efficiency, cost, convenience and efficient hinterland connections.

**General Summary of the Moderator**

To achieve a competitive advantage, port operators must implement strategies that involve technology, value added services, relationship with clients and liner

operators, facilitation of inter-modal transport and channel integration practices. This implies that they must look beyond the narrow limits of the port location in order to achieve competitiveness. By benchmarking their own port's performance on the above-mentioned factors, port operators are also able to determine the degree of integration of their port/terminal in the supply chain and decide on strategies to enhance such performance.

An evaluation of the port/terminal integration in the supply chain can also be useful to shipping lines, logistics service providers and inland transport operators. It has been established that the interest of these stakeholders, being part of the supply chain, is strong as the integration of ports and terminals in supply chains has an impact on their operations and the satisfaction of their customers.

The session described the new role of ports in the global supply chain. Major gateway ports need to be integrated effectively into the supply chain networks. Key factors for success include port performance in addition to fast, reliable flexible and cost-friendly intermodal connections with inland corridors.

In his closing remarks, the moderator expressed his appreciation to the Greek Ministry of Merchant Marine, the Aegean and Island Policy for its warm hospitality and thanked participants for their valuable contributions.