

Arab Academy for Science, Technology and Maritime Transport The International Maritime and Logistics Conference "Marlog 8" Towards Global Competitiveness in Maritime Industry "Investing in Ports" | The Trends, The Future 17 - 19 March 2019

# Maritime and Logistics Perspectives on Short Sea Shipping Sustainable Solutions to Road Congestion



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### Introduction

- 4. Obstacles
- 5. Sustainable Solutions and Positive Initiatives
- 6. Findings and analysis
- 7. Concluding Remarks

**European Union** 



#### OUTLINE

- 1. Definition
- 2. Approach to Sustainable Transport
- 3. Advantages and measures or approach adopted by EU

Short Sea Shipping

is a concept actively promoted by the European Union as an efficient alternative to road congestion and bottlenecks. This mode of transport has many other advantages, like being environmental-friendly and economic.

## Short Sea Shipping Definition

No universally accepted definition to describe SSS.

simply refers to the movement of cargo & passengers by water between points, situated within relatively close proximity to one another or short distances., not across Oceans



Domestic, coastal or inland shipping are terms used to describe SSS

SSS is a sustainable transport link in the door-to-door supply chain & an integrated part of the logistic transport chain between supplier & user.

EC defines SSS as the movement of passengers & cargo by sea within Europe, both inside & outside the EU, as well as to & from all ports in Mediterranean, Baltic & Black Sea.

40%

of all trade within the EU is now carried by sea, surpassed only by road transport.

But **the potential of SSS is great**, because it could take substantial volumes of goods traffic off Europe's congested roads & ease major road bottlenecks.



SSS plays an important role in reaching the objectives of the European Transport Policy, because SSS can help EC has made SSS as one of the major priorities for European transport whereas maritime industries have made SSS as one of their key areas for development.

- curb the forecasted substantial increase in heavy goods vehicle traffic,
- 2. rebalance the modal shares
- 3. bypass land bottlenecks
- address global warming and climate change

#### **Maritime Sea transport**

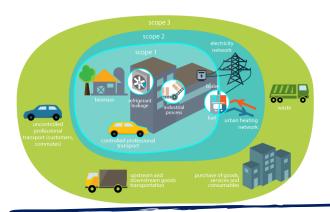
is a fully integrated component of door-to-door intermodal transport services and a major contributor to sustainability, cohesion, and competitiveness. Specifically, SSS has the potential to accommodate much of the anticipated growth in freight without increasing pressure on Europe's already crowded roads.



Sea or water transport is considerably more environmentally friendly and sustainable than motor vehicle transport.

#### **Road transport**

accounts to 80 % of transportation related greenhouse gas emissions.



**Maritime traffic** has a distinct energy-saving advantage over competing modes of transportation.

**Congestion** reduces the efficiency of vehicles & correspondingly increases the amount of pollution emissions from the atmosphere.

The **Sea transport** involves a low emission of environmental non-friendly gases compared with train & road transport.

The study of Nicole Trepanier presented statistics concerning gas emissions from the means of sea transport.

- 1. **CO** emissions from sea transport are 2.4 times lower than the emissions from train transport and 5.5 times lower than the emissions from road transport.
- 2. **CO2** emissions from sea transport are 3.4 times lower than the emissions from train transport and 6.3 times lower than the emissions from road transport.
- 3. **NOx** emissions in sea transport are twice lower than the emissions resulting from train transport and 3.1 times lower than the ones resulting from road transport.

The **sea transport** is suitable for transport in every part of the globe,

**Road infrastructure construction and expansion** is expensive and disturbing for local residents whereas sea transport can accept more traffic without adding infrastructure with expensive costs.



The development of SSS is an opportunity to create a large number of jobs and employment in the maritime sector in the future and present period.

By fostering global trade, SSS also promotes the social & economic growth of third countries bordering the peripheral maritime regions and interested in links with the infrastructure of the European transport network. All the advantages of the maritime sea transport indicate the great significance of this activity for the economic agents, national economies and the environment.

## European Union's Initiatives for Promoting the Advantages of the Short Sea Shipping

In early 1990s, the EU has carried out a substantial amount of work on the subject resulting in SSS becoming a key EU transport policy priority.

In 1992, EU institutions & industry launched a joint approach on the promotion of SSS, as a means of relieving congestion on European roads and bypassing natural bottlenecks such as tunnels through mountain ranges.

The density of the population and the presence of substantial river systems in Europe make SSS as a viable transportation alternative.

# European Union



## European Union's Initiatives for Promoting the Advantages of the Short Sea Shipping

In order to support SSS, a number of initiatives are being advanced in the EU, namely:

- 1. Integrating SSS into the logistical door-to-door transport chain
- **2.** removing administrative bottlenecks such as customs forms that result from the variety of different countries in the Union,
- **3.** improving environmental performance,
- 4. identifying suitable corridors, and
- **5.** studying the issue of greater standardization in handling ocean shipping containers.

The EC also had an active policy to promote Short Sea Shipping.

1999

EC presented a Communication with a comprehensive approach to increase the use of the mode.

2010

The recent EC White Paper on European Transport Policy emphasized the role of SSS in maintaining an efficient transport system in Europe now and in the future.

## Obstacles for Further Development of Short Sea Shipping

A number of obstacles still impede the further development of SSS.



Many commercial players still view it, wrongly, as an old-fashioned mode of transport.



Full integration of SSS into door-to-door multimodality remains to be accomplished.



The complexity of documentary & administrative procedures in SSSS is a fact that needs to be examined & tackled.



The efficiency of ports, port services & port-hinterland connections needs to be enhanced.

The Community is in the process of pursuing solutions to a number of these obstacles. According to several analyzed reports on SSS, the EC is convinced that:



co-ordinated efforts at all levels (Member States, regional, local, industry & Commission) will substantially help accelerate the growth of SSS, alleviate obstacles and allow SSS to become a true success story of the 21st century.



Even though the maritime & logistical industry is chiefly responsible for developing SSS, intervention on the part of European, national & regional institutions is nevertheless essential to create favourable conditions for such development.



Until now, there have been some EC positive initiatives, such as:

the definition of national focal points, agreements on EU legislation in relation to financing programmes & simplified IMO-FAL (International Maritime Organisation - Facilitation of international transport) forms required, when ships enter or leave ports.



EC is engaged in strategies to identify critical bottlenecks against the widespread use of SSS, as well as its possible solutions. Eg doc & admin procedures differ widely bet member tates and bet indv porys



EC also possible proposed simplifications on customs rules for

Currently several projects have been developed:



investments for adaptation of terminals at each port,



introduction of new upgraded trailers for rapid loading & unloading



and improvement of a 'tracking and tracing' system for the exchange of consignment data with customers, via electronic data interchange (EDI) or the Internet.



The key to the development of SSS is thru

**INTERMODALITY** 

which pertains to the easy transfer of goods & passengers between road, rail, sea and air transport.

Sea transport is already highly competitive for long distances. But SSS:





needs become more attractive as an alternative for shorter journeys.



Also SSS needs to be integrated into logistics chains in order to offer door-to-door solutions to customers.







EC also financed and supported the launch of the **European Shortsea Network (ESN)**, which links the national SPCs to facilitate collaborations and the exchange of experience.

The emphasis of the role of maritime sea transport in the desired evolution of freight traffic in the European Union target are:



to reduce the saturation of the road networks



to improve access to peripheral and island regions and



to encourage more environmentally-friendly modes of transport (Gothenburg European Council in 1998).



The Trans-European Networks policy was developed gradually.



The European Parliament and the Council of Ministers adopted a decision setting out the guidelines for the development of the Trans-European Network in 2010.

this decision was revised and included sea and inland ports. The White Paper considered that one of the primary missions of the Trans-European Network for Transport (TEN-T) was to "relieve congestion on major routes".

### **Findings And Analysis**

Based on various readings of European reports, internet search, observations, documentary and content analysis, the information & data generated have been noted & analyzed focusing on the advantages and challenges of SSS.

Sustainability in maritime sector is not just marketing. Environmental regulation becomes more comprehensive and more stringent.





Time is money. This is also true for ports wherein a precise planning of processes & operations is even more important given the enormous impact of the tides & the costs for dockage.



## **Findings And Analysis**



Time is money.



The Philippines for ex, is currently investing in land transportation to ensure goods are moved out of our ports & delivered to the end. There is plenty of room for consolidation in the local shipping & logistics industry.



At present, Phils. has more than 12,000 domestic merchant vessels operated by thousands of companies and individuals, (Ref: MARINA)



We see the benefits of consolidation, as it would entice companies to come together to form more efficient operations & offer better quality service.

### **Findings And Analysis**

It can be surmised that SSS is a successful mode of transport in the EU. It is designed to increase the efficiency of the overall transport system in order to meet current & future demands arising from economic expansion, increased trade and population growth. Hence,



aspects of SSS...



Member States governments, (Romania Egypt etc), should establish policies, programs & regulations to help create an environment that enables SSS industry to operate efficiently.



The authorities have to promote & support initiatives & partnerships with others having common interests & goals.



There is a need to work together with the whole transportation industry & with other partners in order to build an integrated transportation system.

## Short Sea Shipping





The authorities should investigate Short Sea Shipping opportunities and application in Romania or Philippines through regional studies (regarding congestion, bottlenecks, traffic flows, potential routes/corridors and potential ideas for service).

There should be organized regional workshops to bring together parties with an interest in exploring Short Sea Shipping opportunities. MARLOG8 hosted by AASTMT may explore SSS opportunities for Wgyot in shaping the future of ports in the Arab region





SSS needs to be developed within an integrated and participatory approach with the reliable involvement of stakeholders from the entire sector, in order to fulfill its economic, commercial, social and environmental roles

recommendations provided in the other papers submitted that may contribute t the 7 Super Trends or &ST

SHORT SEA SHIPPING SUSTAINABLE SOLUTIONS (5 S) TO ROAD CONGESTION

## SEVEN SUPER "S" TRENDS (SSST OR 7ST)

- SIZE AND SPECIALIZED SHIPS (INSTEAD OF ROAD CONSTRUCTION)
- STEMS AND SKILLS (MANPOWER)
- SPEED (TIMELINESS DELIVERY)
- SUSTAINABILITY (GREEN SHIPPING)
- 5.
- SAFETY AND SECURITY (ALL ARE COUNTED FOR /ETA/ÈTD ARE RECORDED
- SCARCITY AND SUPPLY ( MORE GOODS /PEOPLE TRANSPORTED ON SEA THAN IN ROADS)

The ultimate success depends on how shippers & carriers respond to the challenges & whether the economics supports establishing such enterprises.





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