



## **Promoting Short Sea Shipping & Intermodality**

# **A Knowledge Repository to support flexibility in port operations and improve modal shift**

**SHORT SEA CONFERENCE 2011 - BILBAO**

Ioannis G. Koliouis

PROPS Project Manager

Bilbao, April 13th, 2011

# Today's Agenda

- Background Information
- PROPS Objectives
- Results and Tools Developed
- Next Steps

# Today's Agenda

- Background Information
- PROPS Objectives
- Results and Tools Developed
- Next Steps

## A little background information: EU 14 SSS Promotional Actions (FP7)...

### Operational Actions

- One-stop administrative shops
- Securing the role of SSS Focal Points
- ***Ensuring smooth functioning of SS Promotion Centres***
- ***Promotion of SSS as a successful transport alternative***
- Collection of statistical information

### Technical Actions

- Guide to customs procedures for SSS
- ***Identification & elimination of obstacles to SSS***
- Computerisation of Community Customs procedures
- RTD measures

### Legislative Actions

- Implementation of the IMO-FAL directive on ship reporting
- Implementation of the Marco Polo programme
- Standardisation of intermodal loading units
- Motorways of the Sea
- Improving environmental performance of SSS

**PROPS focuses on Short Sea Shipping promotion**

## ...and the recent e-Maritime initiative which focuses in the elimination of (many) SSS obstacles and bottlenecks.

### Short term actions

- Simplification of customs formalities
- Guidelines for speeding-up checks relating to animal and plant products
- Simplification and harmonisation of administrative formalities for vessels at EU ports

### Medium term actions

- Vessels having a call in a third country
- Deployment of e-maritime systems
- Administrative single window
- Intermodal carriage of dangerous goods



### Applications

- Administration
- Ship operation
- Port/terminal
- Transport logistics
- Improving life and sea and promoting seafaring

**Ports are key nodes in the supply chains and as such, operational inefficiencies are more visible there than anywhere else in those chains!**

## The 2011 White paper puts forward a new Transport Vision, focusing more on infrastructural aspects

- ***Infrastructure shapes mobility.*** No major change in transport will be possible without the support of an adequate network and more intelligence in using it. Overall, transport infrastructure investments have a positive impact on economic growth, create wealth and jobs, and enhance trade, geographical accessibility and the mobility of people. It has to be planned in a way that maximises positive impact on economic growth and minimises negative impact on the environment.
- **Congestion is a major concern**, but will this offer the opportunity to non-road transportation to flourish?
- *Transport Drivers for the Next Program Period*
  - *Screening to identify key innovative technologies,*
  - *Maximize existing resources,*
  - *Bring together all relevant actors within the transport system [...]*
  - *Research agendas -> design new standards and build demonstration projects*
  - *Deployment of clean energy*

**Source:** WHITE PAPER: Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, 28.3.2011

**Ports are “obliged” to lead or at least follow closely market trends, unless they plan to lose on competitiveness**

## EU already put forward innovation in transport operations

- Propose a core network consisting of **nodes** and **links** relying primarily on the efficient use of existing infrastructure via ITS/smart mobility solutions and aiming at bridging missing links, facilitating multimodality and creating links to third countries.
- Establish a firm long-term infrastructure plan for the completion of the core network together with EU Member States detailing the projects to be completed as well as the modalities.
- Support via EU and National financial tools the firms that introduce operational improvements



Photo: Courtesy of CoolBOXX



Photo: Courtesy of Unit 45

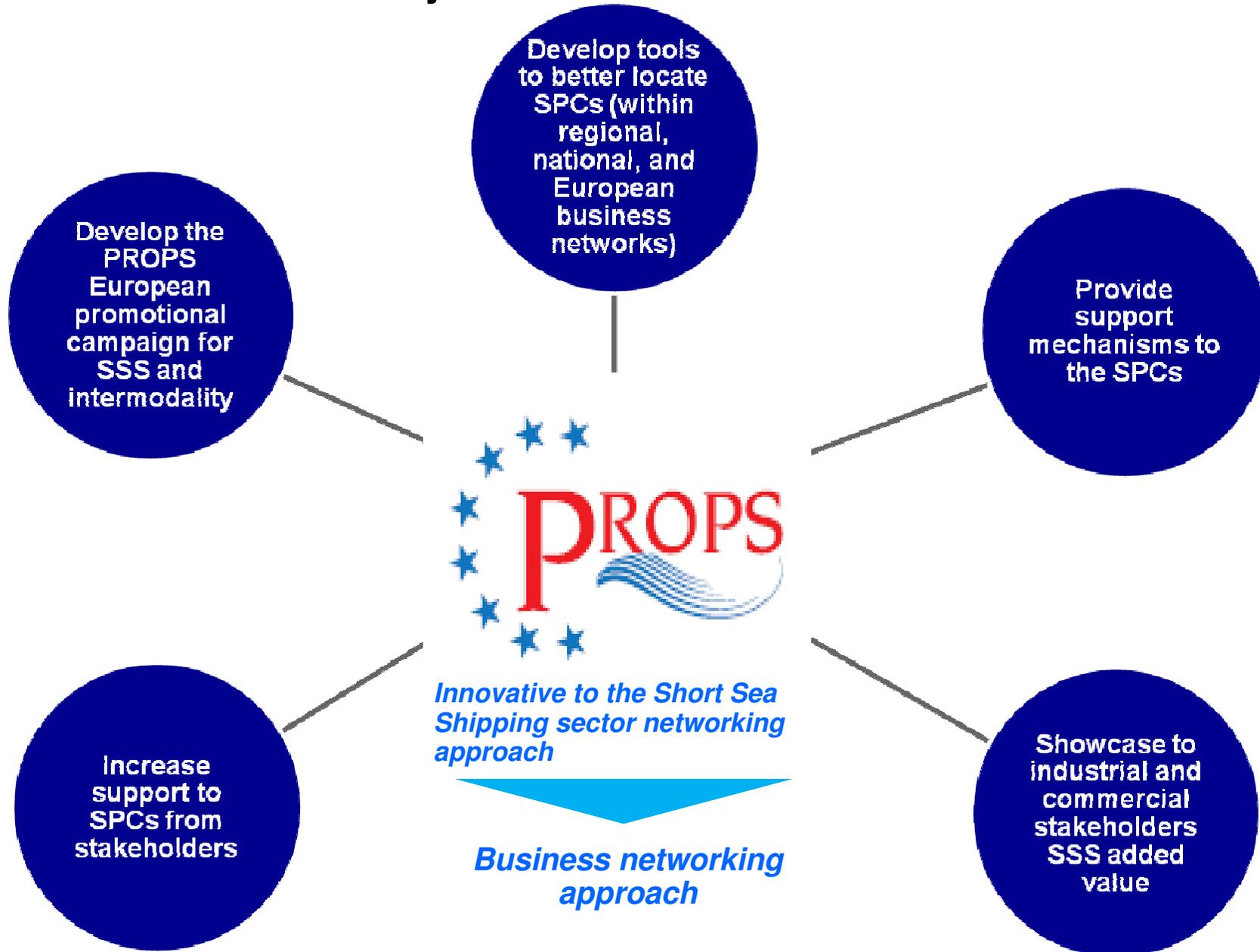


Photo: Courtesy of Naiades

# Today's Agenda

- Background Information
- PROPS Objectives
- Results and Tools Developed
- Next Steps

## PROPS has five central objectives



## So what should we do and how should we promote Short Sea Shipping? Where do ports come in (and how???)

- We have to be **provocative** in order to make EU [...] more appealing (Mr. Baroso, President European Commission)
- We can boost productivity only by having a **paradigmatic shift** (J. Shapiro, Harvard Business School and Jonathan Byrnes, Center for Transportation, MIT)

... **but** ...

- ▶ The average Supply Chain decision maker needs basic and reliable information fast (the quick and dirty part of our job!)
- ▶ Everyday tools that increase efficiency are important too
- ▶ Tools that enable “teasing” and “experimenting” might do the trick...
- ▶ ...but in the mean time, policy restrictions (SECA, Clean Energy,...) , market trends (productivity boost, new container dimension standards, ...) reduce the port business scope.
- ▶ We have to provide to the average logistics decision maker, all of the info needed!

**Contrary to common belief, small changes are the ones that shape business practices, and this knowledge has to be effectively communicated**

## PROPS identified through a stakeholder survey some key requirements in the short sea shipping business

### Decision-Making

- Choice criteria of *freight forwarders/logistics providers include*
  - *Cost,*
  - *Reliability,*
  - *Transit time,*
  - *Safety, &*
  - *Service level*
- SSS is generally well perceived, but in multimodal set-ups, transhipments issues affect the perceived low reliability, long lead time and higher costs

### Information Flow in SSS based transport chains

- Lack of cargo tracking & tracing
- Exchanges done via phone, fax, SMS, post service, radio and shipments newsletters;
- **Technology is there but usually underused!**
- **Require to have more info at their desktop (...usually yesterday...)**
- Lack of entry level information about supply chain nodes (especially port terminals, lines, etc.)

### Future challenges

- Cost advantage of SSS is at risk
- SSS could fulfill sustainable characteristics in a more credible manner
- Economic context favors bigger vessels
- Problems related to cargo consolidation
- Hinterland connections and infrastructures are not 100% developed
- Remove the burdensome image of SSS
- Wide spread adoption of eMar

**Ports are affecting the bottom line. In an extended relationship modus, they can boost SSS service and gain higher market shares.**

# Today's Agenda

- Background Information
- PROPS Objectives
- Results and Tools Developed
- Next Steps

# PROPS developed a first-step to SSS @ <http://www.props-sss.eu/propsknowledge/>

The screenshot displays the PROPS website interface. At the top, there is a header with the PROPS logo and the text "Promotional Platform for short sea Shipping and Intermodality". Below the header, there is a navigation bar with a "CUSTOMISED HOMEPAGE" button, a "LOGIN" button, and a "WEBSITE SEARCH" input field. The main content area is divided into several panels:

- Transport and Logistics Developments:** Includes sections for "developments for co-modality" and "optimum integration of maritime services into logistic chains". It also lists "Dominant trends in logistics" and "Intermodal developments".
- ESN Network:** Features "The European Shortsea Network Members" and lists "Belgium SPC" and "Bulgaria SPC".
- Shortsea Best Practices:** Includes "Best practices and lessons learned" and "Shortsea best practices Shipping best practices" with examples like "TRANSFENNICA (Zeebrugge - Bilbao)" and "GRIMALDI Terminals".
- EU Maritime Transport Policies:** Contains "Policy Communications", "Policy Articles", and "Comments". It also lists "Strategic Goals" and "Action plans".
- Important News:** Features a "NEWS" icon and a list of recent news items, such as "Foss Maritime receives Environmental Achievement Award" and "€6.4 billion for smart growth and jobs".
- Shortsea Services:** Includes a section for "Shortsea services from EU countries and from shipping companies" with links to "Find Shortsea services for a specific country" and "Link to Short Sea Shipping Companies".
- Shortsea Decision Support Services:** Includes a section for "designing collaborative ventures between SSS stakeholders".

Fully customizable Portal

The login form window is titled "Close" and contains the following elements:

- A "Username" label followed by an input field.
- A "Password" label followed by an input field.
- A "Login" button.
- A link: "Not yet a member? [Register](#)".

# PROPS Knowledge Portal offers a systemized set of SSS and Intermodal related information

<h3>Index</h3> <ul style="list-style-type: none"> <li>⊕ Economics and Regulations</li> <li>⊖ Transport &amp; Logistics Developments             <ul style="list-style-type: none"> <li>⊕ Dominant trends in logistics</li> <li>⊕ Human resources - education &amp; training</li> <li>⊖ Intermodal developments                 <ul style="list-style-type: none"> <li>⊖ Short Sea Shipping developments                     <ul style="list-style-type: none"> <li>SCS221</li> <li>SSS solutions across the continents</li> <li>Integration of SSS in Intermodal chains</li> <li>Bottlenecks - progress reports</li> </ul> </li> <li>Ports organisational and infrastructure strategies                     <ul style="list-style-type: none"> <li>SCS232</li> </ul> </li> <li>Standardisation of cargo units                     <ul style="list-style-type: none"> <li>SCS233</li> </ul> </li> <li>EU e-Maritime Initiative                     <ul style="list-style-type: none"> <li>e-Maritime</li> </ul> </li> <li>The 'European maritime transport space without barriers' initiative                     <ul style="list-style-type: none"> <li>SCS235</li> <li>SCS22</li> </ul> </li> </ul> </li> <li>⊕ Key Performance Indicators</li> </ul> </li> <li>⊕ Safety Security &amp; Sustainability</li> <li>⊕ Technology Assessment</li> </ul>	<h3>Short Sea Shipping developments</h3> <p><b>SCS221 AUEB</b> European Short Sea Shipping has been defined as any carriage of goods and passengers between ports within the European Union, and between European Union and nearby countries.</p> <p>European Geography is highly favourable to Short Sea Shipping, with more than 67,000 km of coastline and very few industrial centres being more than 400km from the coast. Additionally there are approximately 25,000km of navigable inland waterways.</p>  <p>Modal shift from road to sea has been a major objective of the EU as well as the USA freight transport policy, in the interest of reducing the load on the environment, freeing up road capacity and supporting sustainable development. Despite this, apart from very specific niches there has been less change in the market shares of rail, inland waterways or short sea, than was expected in Europe. Until now, companies have shown to be reluctant to consider major changes in the way they run their transport processes. Current policies and business strategies for modal shift has turned to the new concepts such as "co-modality" and "business networking" and opens up new possibilities to study modal shift at a company, regional, national or continent level. Particularly in Europe key drivers to expand short sea shipping are:</p> <ul style="list-style-type: none"> <li>&gt; Improved integration of SSS in multi-modal, logistic transport chains</li> <li>&gt; Elimination of barriers to the efficient operation of short sea shipping</li> <li>&gt; Enabling pan-European policy actions</li> </ul> <p>Developments with reference to the Commission's 14 SSS Promotional Actions in the "Programme for the Promotion of Short Sea Shipping" COM (2003) 155, will be reviewed. Links and information will be provided pertaining to:</p> <ol style="list-style-type: none"> <li>1. Actual new or enhanced SSS services</li> <li>2. Developments of facilities for e-booking of SSS services</li> </ol>	<h3>Subject News</h3> <p>05/06/2009 - Fines for emissions scheme cheats</p> <p>04/06/2009 - BIMCO General Meeting</p> <p>30/04/2009 - French support for SSS</p> <p><a href="#">Click here</a> to view all related news</p> <h3>Linked Topics</h3> <p>Case Study - Canadian Transportation "Sustainability"</p> <p>Case Study - Japanese Business Practice Finance of Transport Services</p> <p>The 'European maritime transport space without barriers' initiative</p> <h3>Related Documents</h3> <p><a href="#">WORLDNET_Long distance freight flows.pdf</a></p> <p><a href="#">USA SHORT SEA SHIPPING INITIATIVE.pdf</a></p> <p><a href="#">07_tpt_Short_sea_shipping.pdf</a></p> <p><a href="#">SSS_Policy from an EU perspective.pdf</a></p> <p><a href="#">Council conclusions March 2009.pdf</a></p> <p><a href="#">Click here</a> to view all related documents</p> <h3>Information Sources</h3> <p>ESN - European Shortsea Network</p> <p>ESPO EU Sea Ports Organisation</p> <p>Marco Polo Programme</p> <p>Lloyds List</p> <p>BIMCO</p> <p>EMSA - EU Maritime Safety Agency</p> <p>Alert</p> <p>IMTC</p>
---	--	--

# The average stakeholder when building a service needs guidance information, as well as who did what, how and whether he made a profit

**Promotional Platform for short sea Shipping and Intermodality**

WEBSITE SEARCH  go

**Best Practices - Academy of Failures**

- Shortsea best practices
- Shipping best practices
  - TRANSFENNICA (Zeebrugge - Bilbao)**
  - GRIMALDI
- Terminals
- Trucks

**TRANSFENNICA (Zeebrugge - Bilbao)**

**Transfennica service from Zeebrugge to Bilbao Viacombi Project**

**Routes operated**

Transfennica operates the service running from Zeebrugge to Bilbao on 26th September. Every Monday, Wednesday and Friday there is a sailing from both ports. The transit time between both ports is only 38 hours. The vessels, mv Friedrich Russ and mv Elisabeth Russ, take up to 190 trailers as well as some containers.

A number of leading Spanish transport companies have decided to ship a large part of their North-European freight through the Bilbao-Zeebrugge route of Transfennica.

They follow the example of companies like Bridgestone, LKW Walter, Ewals Cargo Care and Heitrans. This development is seen as a big breakthrough in the Spanish market. Also the well known Grupo TT and Chiné S.A. have decided to use the services of Transfennica. On a yearly basis 140,000 tonnes of cargo is shifted from road to shortsea.

**Logistic and technical organization**

The operation is principally conditioned by the infrastructures in the port of Bilbao that currently consist of a special portainer and double lane Ro-Ro ramps. The port also has a parking space for 366 lorries, a direct access to the port from the principal motorways and a railway connection. At the port of Bilbao the loading and unloading ramp is being adapted. The ramp is also being broadened to allow faster loading and unloading.

A road haulage company ships on average ten 40' containers on each of the 3 weekly shippings. These all contain palletized goods and do not require any special handling. The average load in a container is 12 tonnes.

The operation time is composed of a half day from pick up to port, 38 hours shipping and then most drop-off points for this company lie within a half days journey of Zeebrugge. The shipping company places its own containers at disposal (20ft & 40ft palletwide and palletwide high cube) and it also offers opportunities for the shipment of trailers and shippers' owned containers.

**Economic aspects**

Road Haulage Company A estimates that the shipping via the ro-ro service is 15% cheaper per ILU than the alternative route by road. The change from the all road route to the route with shipping involved no investment costs on behalf of Road Haulage Company A. The shipments sent with Transfennica account for approximately 40% of the total transport volume moved by the Road Haulage Company A. They use no other intermodal services where road transport is an alternative. No financial support is provided by either local or national governments in Spain. The initiative has requested an EC grant of 6,800,000 euros under the Marco Polo support scheme.

**Environmental aspects**

In this best practice, ten 40'containers are sent 3 times a week from Bilbao to

**Subject News**

05/06/2009 - Transfennica increases Zeebrugge-Bilbao capacity

[Click here](#) to view all related news

**Linked Topics**

No linked topics available

**Related Documents**

Bilbao Zeebrugge.pdf

[Click here](#) to view all related documents

**Lessons Learned**

Initial outcome

Continuous success

[Click here](#) to view all lessons learned

**Information Sources**

Transfennica

World Cargo News

[Click here](#) to view all related Sources

**Related Projects**

No related projects

**Related Policies**

No related policies

**Related Products**

No Product Services available

**Bilbao → Tilbury**

Departure	At	Arrival Tilbury	At
Friday	20:00	Sunday	14:00

**Tilbury → Zeebrugge**

Departure	At	Arrival Zeebrugge	At
Sunday	20:00	Monday	08:30

**Tilbury → Bilbao**

Departure	At	Arrival Bilbao	At
Sunday	20:00	Wednesday	08:00

**Bilbao → Zeebrugge**

Departure	At	Arrival Zeebrugge	At
Monday	18:00	Wednesday	08:00
Wednesday	18:00	Friday	08:00
Friday	20:00	Monday	08:30
Saturday	14:00	Monday	06:00

**Zeebrugge → Bilbao**

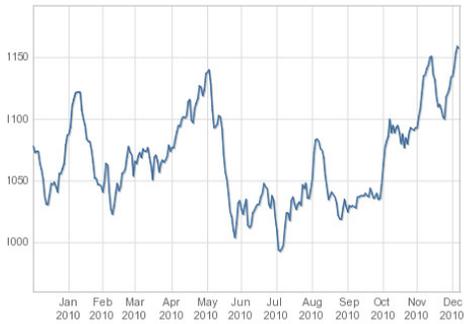
Departure	At	Arrival Bilbao	At
Monday	18:00	Wednesday	08:00
Wednesday	18:00	Friday	08:00
Friday	22:00	Monday	08:00

The PROPS platform capitalizes on the realized benefits and/or the pitfalls from various EU supported projects as well as from independent contributors.

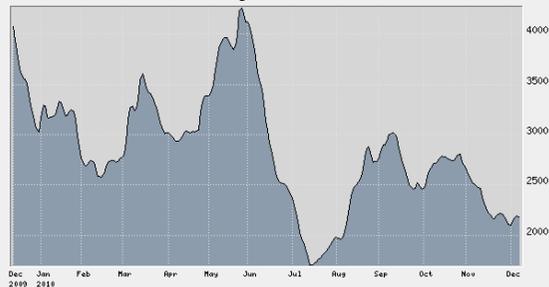
Currently (April 2<sup>nd</sup>) the platform has been populated with as many as 150 different projects. This also serves as a marketing tool: the companies to promote their services for free to some 2.000 specialized email addresses.

# PROPS serves as the one stop shop for SSS related info (i.e. a market ERP Dashboard on your desktop)

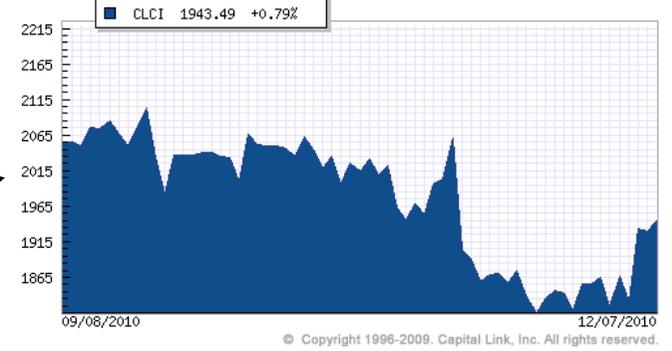
Bunker Index



Dry Index



Container Index



Liner Shipping Index

Port & Terminal Finder

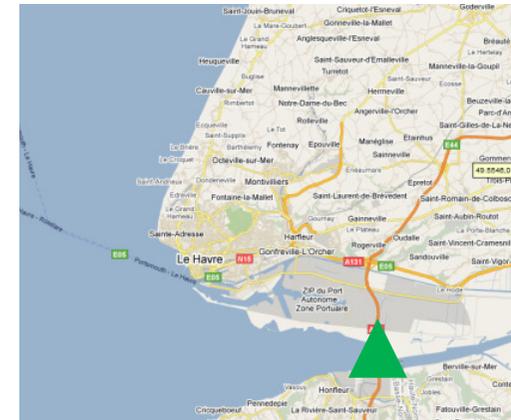
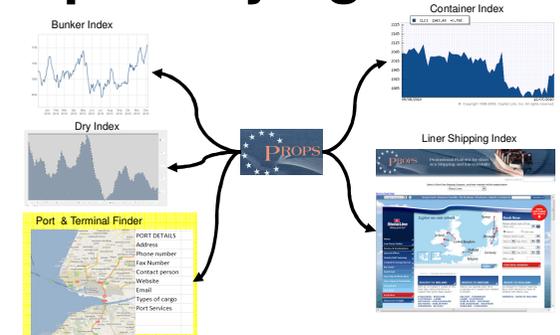
PORT DETAILS
Address
Phone number
Fax Number
Contact person
Website
Email
Types of cargo
Port Services

Register your company @ [www.props-sss.eu/register](http://www.props-sss.eu/register)

# PROPS has included a database of ports around Europe: Key figures from each port are included...

## Key Data Included

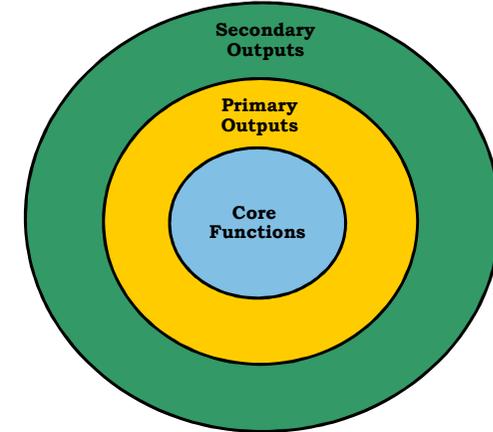
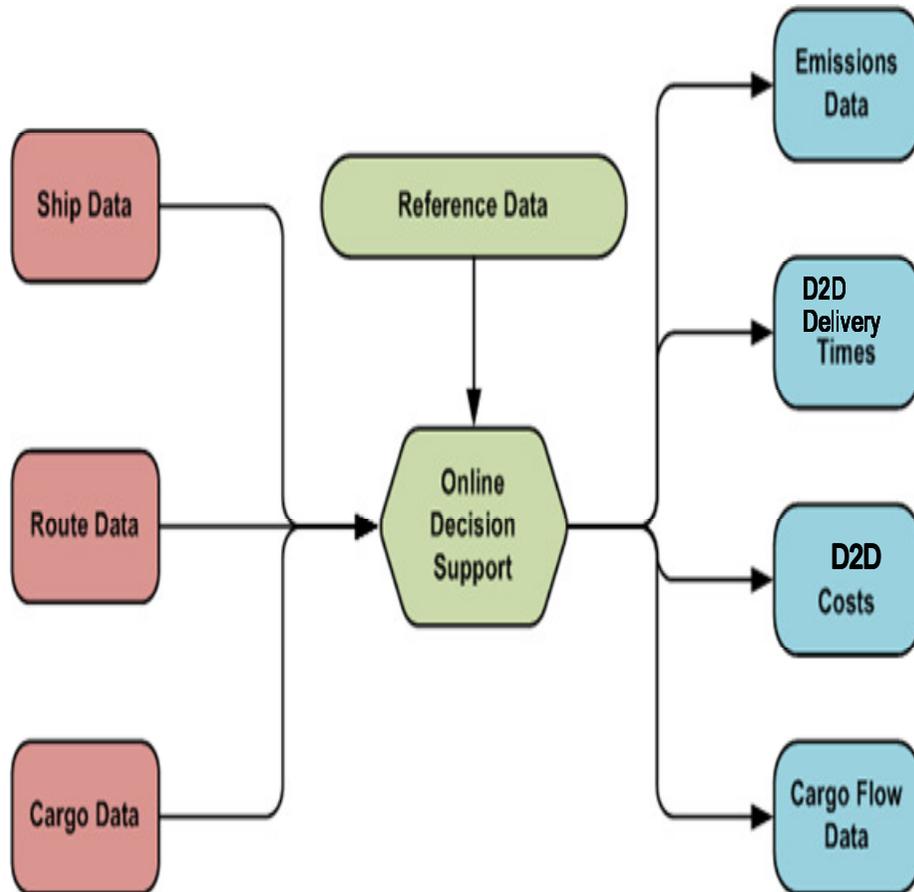
- Port or Infrastructure Name
- Terminal name & Characteristics
- Terminal characteristics
- Total Size of Terminal (m<sup>2</sup>)
- Size of Warehouses (m<sup>2</sup>)
- Size of Open Places (m<sup>2</sup>)
- Size of Other Uses (m<sup>2</sup>)
- TEU Capacity
- Type of Cargo (es)
- Services Provided
- Max size (Capacity)
- Connections to
- Road, Sea, Rail, IWW, Air
- Customs
- Fuel
- Repairs/Drydocks
- Equipment Details
- URL – Contact Details



PORT DETAILS
Address
Phone number
Fax Number
Contact person
Website
Email
Types of cargo
Port Services

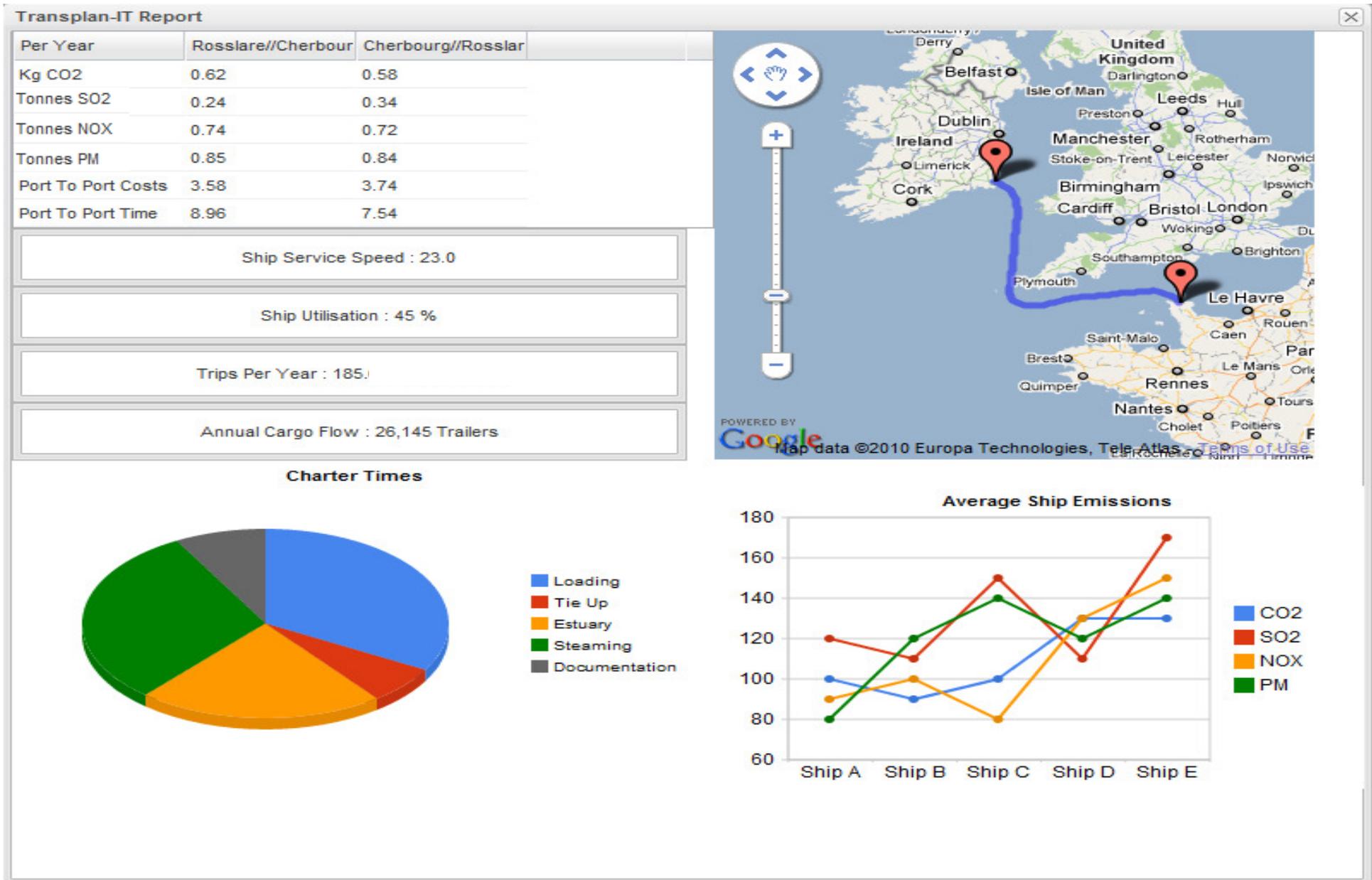
**It was with surprise that PROPS survey showed that many stakeholders were unaware of a nearby port that could serve their needs.**

# ...and associated with the PROPS Decision Support System



- Core Functions:**
  - D2D Unit Cost
  - D2D Delivery Times
  - Emissions per cargo unit
- Primary Outputs:**
  - Route Comparisons
  - Risk Assessments
  - Scheduling of services
- Secondary Outputs:**
  - Distributed Marketing
  - Pricing & Discounting
  - Stakeholder Benefits

# PROPS Decision Support System: Sample Report



# PROPS tools aim to support SSS practitioners at their core logistical activities

## Service Providers & Ports

- Automated pricing, discounting, bookings and support for ship pre-load planning;
- Delineation of hinterlands & forelands around trading ports for marketing purposes;
- **Optimal design and refinement of co-modal networks;**
- Quantification of benefits to co-modal network participants;
- **Quantification of risks associated with changes in market circumstances**

## Shippers

- Specification of indicative transport solutions, as part of their marketing investigations;
- Determination of benefits of co-modal solutions in terms of annual transport savings vis-à-vis conventional or alternative solutions;
- Intelligent articulation of their transport requirements to service providers;
- **Achieving optimal cooperation from service providers through the use of common computational references;**
- Having available emissions data for D2D transport solutions in their pursuit of 'green' trades and services

## Administrations

- Identification of trade gaps between prevailing trades and 'normalised' trades with neighbouring states;
- Identification of transport opportunities between regions or states;
- Determination of the value of new services and new trades – essential data for planning infrastructural developments;
- Provision of supports for preparation of transport strategies

**What a decision maker really needs is fast, reliable and near accurate information about routes and or specific legs**

# To this extent, SPCs support the decision makers and act as one stop shops in building SSS services

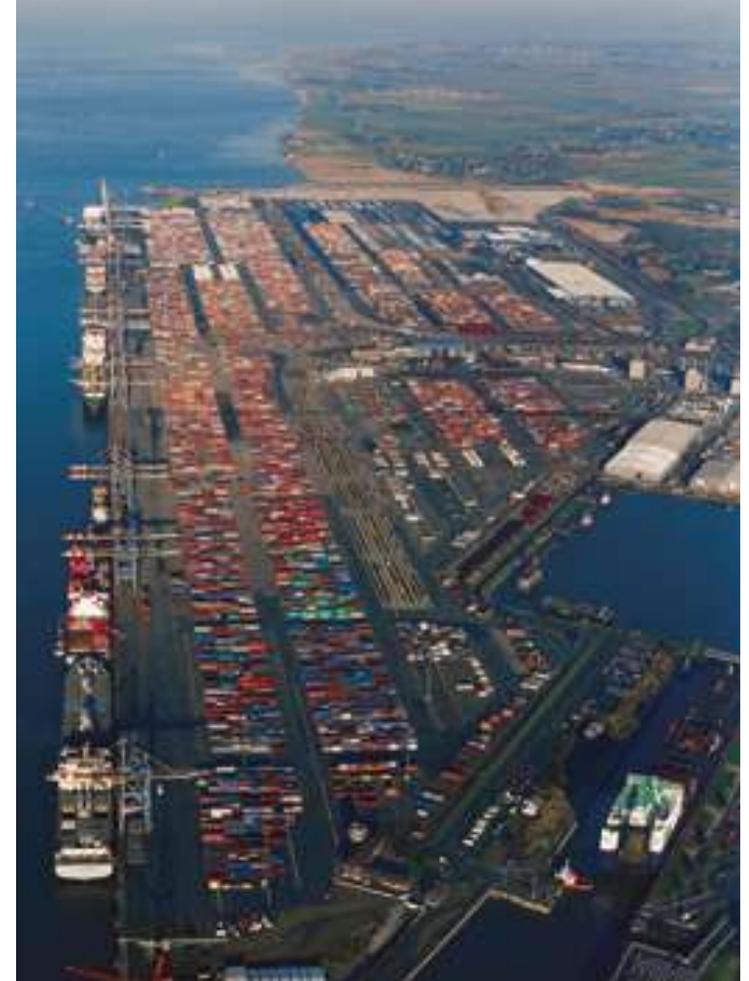
1. Encourage users and potential users to choose shortsea shipping and intermodality	2. Promote knowledge and innovation / improvement within the sector	3. Influence policy decisions affecting the sector	4. Identification of bottlenecks and their solutions	5. European Cooperation
<ul style="list-style-type: none"> <li>• Providing information</li> <li>• Distribution of promotional materials</li> <li>• Communication with current users and potential ones</li> <li>• Bringing stakeholders together incl. organisation of meetings and events seminars, conferences, etc).</li> </ul>	<ul style="list-style-type: none"> <li>• Providing information</li> <li>• Communication with operators</li> <li>• Encouraging operators to develop new and existing shortsea and intermodal services</li> <li>• Drafting market Reports and studies</li> <li>• Organizing meetings and events</li> </ul>	<ul style="list-style-type: none"> <li>• Providing information</li> <li>• Lobbying, (at local, national, regional and EU level)</li> <li>• Organizing meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Communication with transport operators, users and authorities</li> <li>• Identifying bottlenecks (research) and addressing them</li> <li>• setting out proper solutions and involvement in consultative processes</li> <li>• (national and EU)</li> </ul>	<ul style="list-style-type: none"> <li>• ESN meetings and events</li> <li>• Interdisciplinary Meetings (th „focal points“)</li> <li>• Communication with other European stakeholders to resolve national issues</li> </ul>

**SPCs cooperate with all stakeholders being more of an info repository, which can help port operators extend their market scoping.**

# Port Operators and Stakeholders can find info for financial tools from the PROPS platform

- Marco Polo – II
- TEN-T
- INTERREG
- FP7 (various themes)
- National Sources

*Upcoming PROPS Module*



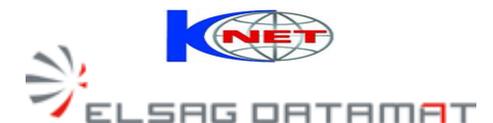
**The idea behind a succesful proposal is the actual comercialization of a business idea**

## PROPS Consortium: A Pan-European Perspective

1. University of Piraeus Research Centre	Greece
2. Nautical Enterprise Centre Ltd.	Ireland
3. University of Turku/Turun Yliopisto	Finland
4. London Metropolitan University (Global Policy Institute)	UK
5. International Business Group Ltd (Shortsea Promotion Centre Bulgaria)	Bulgaria
6. Port Authority of Gijon	Spain
7. INLECOM Systems	UK
8. NORSK MARINTEKNISK FORSKNING SINSTITUTT AS	Norway
9. Bell-Pottinger	UK
10. TIS.pt SA	Portugal
12. K-NET S.A.	Greece
13. Elsig Datamat S.p.A.	Italy
14. Senator fur Wirtschaft und Haefen, Bundesland Bremen	Germany
15. Compania Trasmediterranea S.A	Spain
16. Irish Exporters Association	Ireland



Bell Pottinger Group



# Questions? Comments? Suggestions?

## Contact Details:

**Ioannis G. Koliouis**

**Project Manager**

**Promotional Platform of Short Sea Shipping - “ PROPS”**

**Head of Freight Logistics Solutions**

**Transportation Systems Group**

**University of Piraeus**

**Tel: +30-210-4142556**

**Email: [igk@unipi.gr](mailto:igk@unipi.gr)**