



Technology as enabler for border management and security at border crossings

Jean Verheyen, Vice President Business Development
February 1, 2010

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Agenda



- Porthus Company
- Challenges public sector
- Challenges private sector
- Customs answer to challenging environment
- Technology & process optimisation
 - SMART-CM Project
 - STRATMOS Project
- Porthus' technology/service offering
- Recommendations

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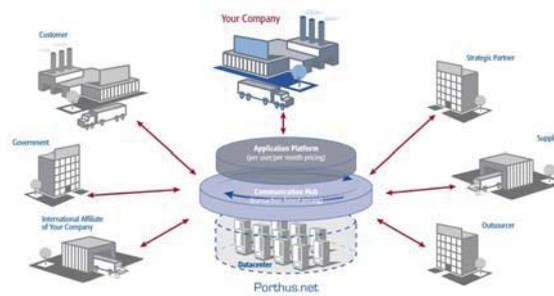
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About Porthus



What we do

- Porthus is an **OnDemand IT solution provider**, enabling organizations to manage complex business processes across company boundaries.
- Porthus leverages **innovative technologies and solutions** to enable its customers to interact and conduct business with their clients, employees, public authorities and business partners in a **reliable, cost-effective and secure** way.



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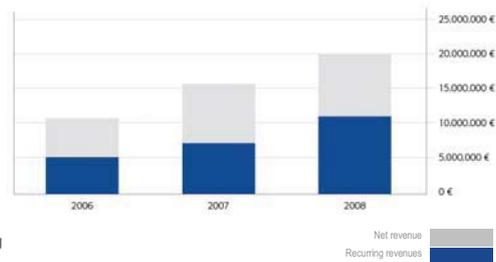
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Porthus Profile



- Founded in 1999
- Offices in Belgium, the Netherlands and Slovakia
- Consistent track record of profitable revenue growth
- Solid business model based on recurring revenue
- Messages: 1.000.000/month
- Porthus currently employs 170+ people
- IPO on Alternext in October 2006
- 1000 market leading customers including DHL, MSC, Unilever, Puratos and Huntsman



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Business:

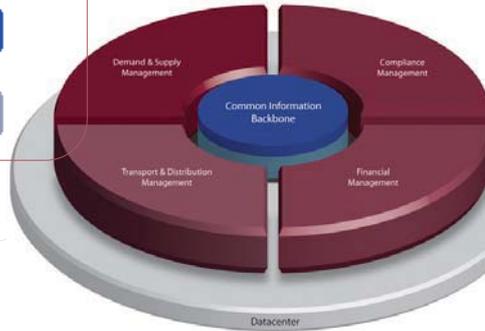
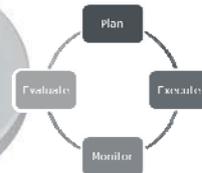
Software supporting Business **processes** in all areas of Global Trade:



Collaboration:

Integrate and collaborate, using a **common information backbone** across a supply chain, resulting in easy:

- Tracking and tracing
- Visibility
- Notification



Operation:

Porthus GTM Suite is provided **"On Demand"**, providing global availability 24/7, information sharing, re-use of information, highest security, latest versions,...

Manufacturers

- >+500
- >Worldwide
- >References: Levi's, Nike, Sony, Volvo, Caterpillar, Honda, Monsanto, Umicore, Bayer, ...

Transport & Services

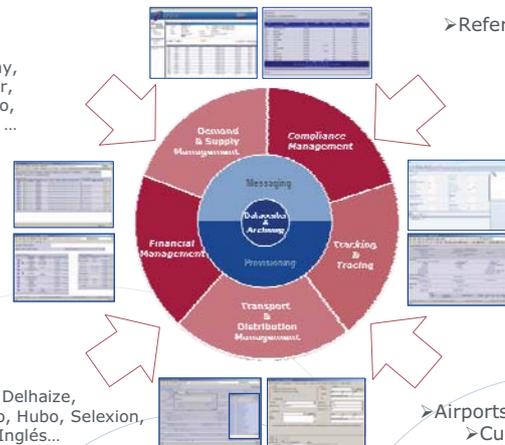
- >+ 500
- >References Services: Terminal Operators & Communities Antwerp, Zeebrugge, Schenker, Ziegler, Katoen Natie, Zuidnatie, ...
- >ReferencesTransport: MSC, Maersk, Hapag Lloyd, KLM, Lufthansa, Iberia, Essers, Schenker, B-Cargo, BASF, ...

Distributors

- >+250
- >Worldwide
- >References: Delhaize, Carrefour, Makro, Hubo, Selexion, Aeveve, el Corte Inglés...

Government

- >Ports of Antwerp, Zeebrugge, Rotterdam, Hamburg, Marseille, ...
- >Airports of Brussels, Amsterdam, ...
- >Customs of BE, NL, LX, UK, ...



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Customs environment today



Federale Overheidsdienst FINANCIËN

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BUSINESS WITH BETTER BALANCE

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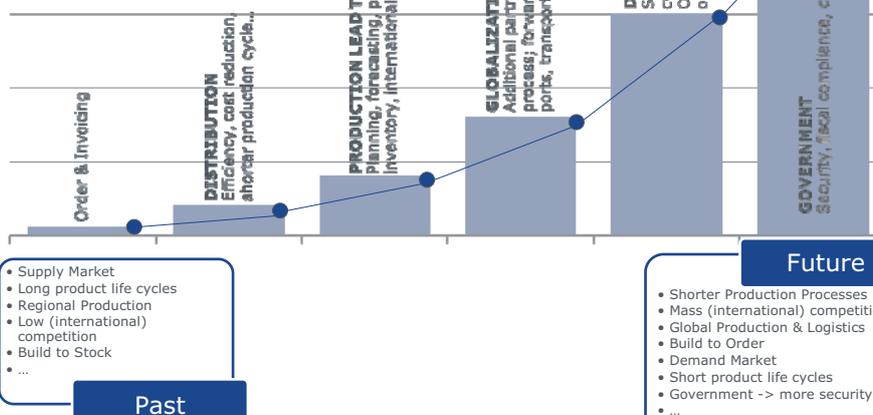
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Evolution in Supply chain & B2B Transaction Volume

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BUSINESS WITH BETTER BALANCE

- 60% GTM processes still manual
- shortage in skills in GTM
- poor technology adoption

(Source: AberdeenGroup)



Concerns of Global Supply Chain Executives



- Lack of critical supply chain process visibility
- Uncoordinated multi-tier supply chain process
- Loss of operational control & difficulty managing third-party providers
- Ability to effectively manage growing operations and distribution networks
- Rising logistics costs
- Longer lead time and lead time variability
- Customs and other regulatory requirements and costs



▪ ...

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Custom's answer to challenging environment



•Today's organisational model

- REACTIF CONTROLS
- BASED ON **DISTRUST**

Transaction-based
CONTROL model

Change to



•Tomorrow's organisational model

- PRO ACTIVE
- BASED ON **CONFIDENCE**

System-based
FACILITATION model

CHALLENGE: RIGHT BALANCE :

control



facilitation

Custom's answer to challenging environment



AS IS :
5 % "traditional"
control on the entire
flow of goods

TO BE :
25 % "traditional"
control on the Non-
certified supply
chains



First step: Authorised Economic Operator



New European Legal tool : Regulation 846/2005 and 1875/2006

Date of commencement : 01/01/2008

3 types of AEO :

AEO – Customs simplification

- Customs compliancy
- System of managing commercial/transport records
- Financial Solvency

AEO – Security

- Security & Safety standards

AEO – Customs simplification + Security

- Customs compliancy
- System of managing commercial/transport records
- Financial Solvency
- Security & Safety standards

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Second step : Secure Trade Lanes (STL)



How to build up a Secure Trade Lane ?

AEO responsible for the **entire supply chain**

or

AEO cooperates **only with other AEO's**

or

AEO concludes contract only with **safe partners**



Goods **inspected by shipper** at point of loading and unloading

and

The integrity of the goods and the itinerary are monitored **on line and in real time**

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Second step : Secure Trade Lanes (STL)



Benefits of a Secure Trade Lane

- Uninterrupted "door to door" supply chain is guaranteed → green lanes
- Less theft and losses
- Less delays
- Better and reliable planning
- Faithfull customers
- Less security – incidents
- Lower inspection costs for consignor/consignee
- More cooperation between consignor/consignee and other parties in supply chain
- Less criminality and vandalism

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A "Single Window" Platform enabling Green Lane implementations



SMART-CM project

- European Research project, FP7 (Framework Programme 7)
- "Smart supply chain management in intermodal door-to-door container transport".
- Goal :
 - Reduction of logistics costs
 - Maximisation of the efficiency, safety and security of the whole supply chain in global and European intermodal container shipment.
- Focus on integration of information technologies, logistics and inspections including customs procedures.
- Contract awarded to SMART - CM consortium : Belgian & Greek Customs, with stakeholders such as : DHL, Kühne & Nagel, Porthus, Cosco, DP World, PSA, Universities of Thessaloniki, Rome, VIL, Port Authorities Antwerp, Ningbo, and many others ...
- Proposed solutions will be demonstrated in 2 demonstration – corridors :
 - One Europe / Asia-Pacific corridor
 - One Europe/ Middle East corridor

Middle East Corridor

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EU-ASIA-AMERICA-AFRICA



EU-ME Corridor
ANR/SKG-DXB-NSA

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Asia-Pacific corridor

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EU-ASIA-AMERICA-AFRICA



EU-AP Corridor
ANR-SIN-NGB/LCB

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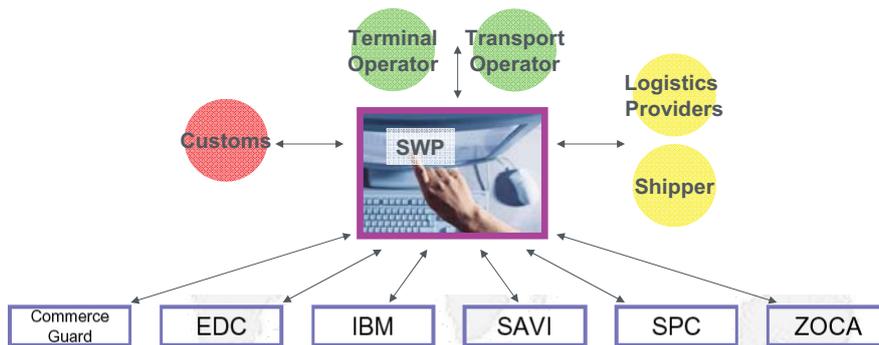
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The SMART-CM Solution

**A service platform and a neutral approach
 for secure and interoperable
 B2B and B2C data communications
 in global door-to-door
 container transport management
 using ubiquitous track & trace technologies**

**Technology Agnostic
 "Single Window" Platform**

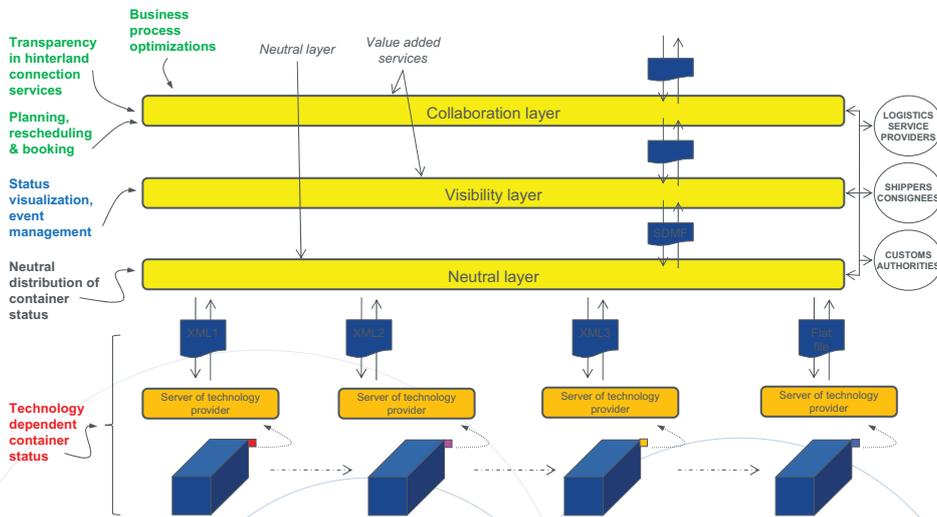
The concept of www.container.com



Container Security Technology (CST): active RFID / satellite comms / multi-sensoric units



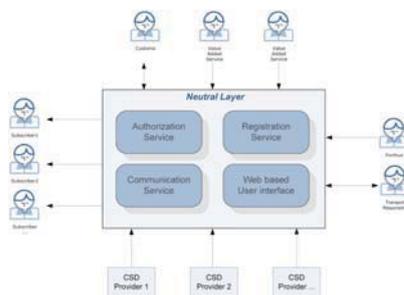
Single window for STL



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Functionality: Neutral layer



Neutrality:

- Not influencing competition
- Not excluding of members
- With no commercial interests
- Independent of technology
- Not infringing on ownership of data

- Only routing information according to preconfigured policies
- Advanced security model ('claims based security') and a service oriented architecture (SOA) to safeguard interoperability and security of data provisioning
- Single window facilitating unified operational procedures

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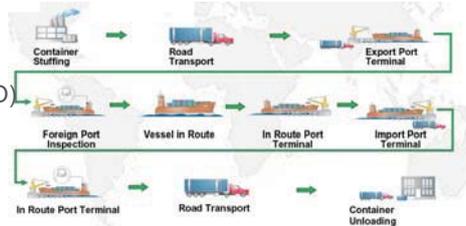
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Customs' requirements supported



Green Lanes implementation for Ocean Freight

- Container stuffed by Authorised Economic Operator (AEO)
- Container closed and secured with electronic seal against unauthorised access en route
- Data transfer to customs for advance risk based assessment of inbound containers
- Accelerated customs clearance (green lane) of 'safe' containers on arrival



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Project 2: STRATMOS



Interreg IVB NSR – StratMoS

The Interreg IVB
North Sea Region
Programme



Demonstration Project 4 (DP4): Secured Trade Lanes in the North Continent – Russia Corridor

*Meeting at the Federal Customs Service of the Russian Federation (FCS RF),
Moscow, 12th January 2010*

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Objectives of demo project DP4



- Trade lane from Flanders to Russia
- Public-private initiative to provide pre-announcement of cargo import to Russian customs authorities
- Achieve facilitation for quicker release of container from St. Petersburg terminal for transport into the hinterland

What are the requirements?



Requirements of customs authorities

- Container integrity status based on CSD, using the standardized SDMF format
- Details of cargo within the container through pre-announcement to Russian customs

Requirements of the logistics industry

- Transparency & visibility & predictability in the end-to-end logistics process
- Exception/event management

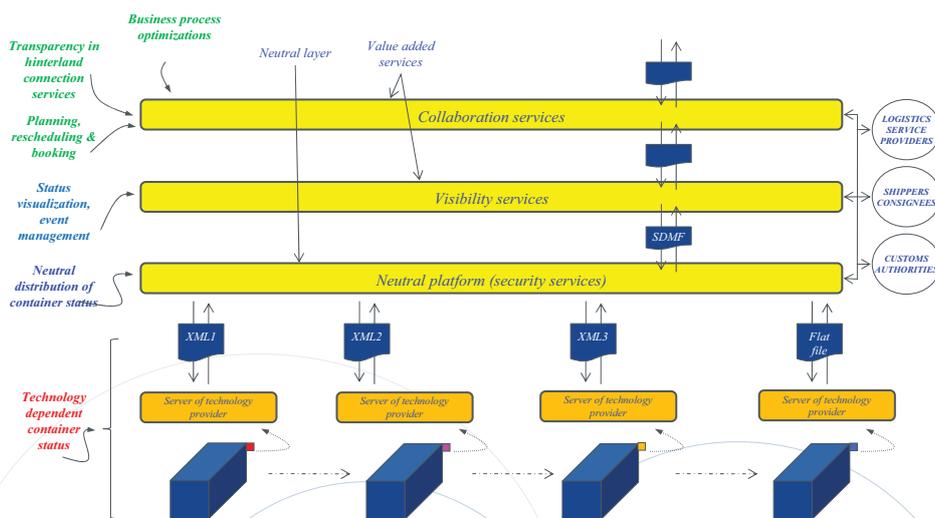
(SDMF = Security Data Message Format)

Logistics actors in the demo case



Lane Description:	MSC northbound flow/outgoing flow
Stuffing location:	Tabaknatie warehouse leftbank
Stuffing by whom:	Tabaknatie
Port of departure:	Antwerp
Terminal of departure:	MSC Hometerminal
Shipping Agent	MSC Belgium
Sea line:	MSC
Port of arrival:	Antwerp
Terminal of arrival:	St Petersburg till port
Logistics provider(s) after arrival:	by receiver
Maximum cycle time for D to D shipment	2 weeks

Architecture



Added value



- Utilization of the single window for container status information, supporting unified operational procedures
- Provide customs authorities with advance information to allow them to take a release decision for a container from the terminal in St. Petersburg
- Use of container status information (if possible combined with other data sources) to provide visibility in the logistics chain

Current status

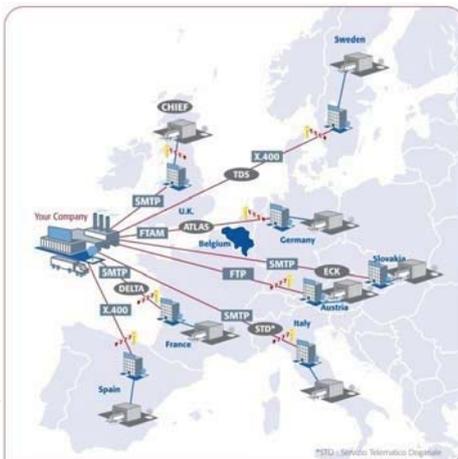


- Technology platform is finalized and ready to go, with some small adjustments to be done based on final process descriptions
 - To be discussed with Russian customs authorities how the pre-announcement of cargo to be imported can be supplied
- Test containers ready to be started but pending approval by Russian customs authorities:
 - FCS RF decision on the customs procedures applying to the CSD ('Treaty of Istanbul')
 - Presence of CSD on container should not create bottleneck on terminal for local customs authorities ('Treaty of Istanbul', or temporary import)
 - FCS RF agreement on control procedures
 - CSD and pre-announcement of cargo details (based on export declaration from Belgium) should then generate quicker throughput of container

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Customs Complexity



- Different systems per Member State:

Belgium	PLDA
France	Delta
Germany	ATLAS
The Netherlands	SAGITTA
United Kingdom	Chief
...	

- However based on the same EU legislation (CDW):
 - Different Business Logic
 - Different Message Formats
 - Different Communication Protocols
 - Different Certification process

Compliance Management OnDemand

Porthus.net Customs

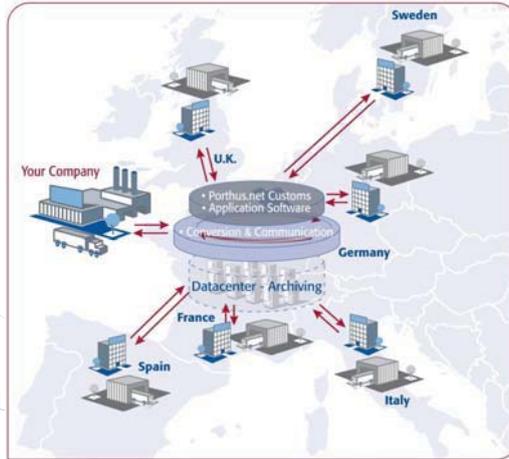


Porthus.net Customs is

the **On Demand solution** to handle your Customs formalities, including:

- Application Software
- Messaging
- Managed Services

For Import, Export, Transit, ENS, EXS, EMCS, Bonded warehouse,...

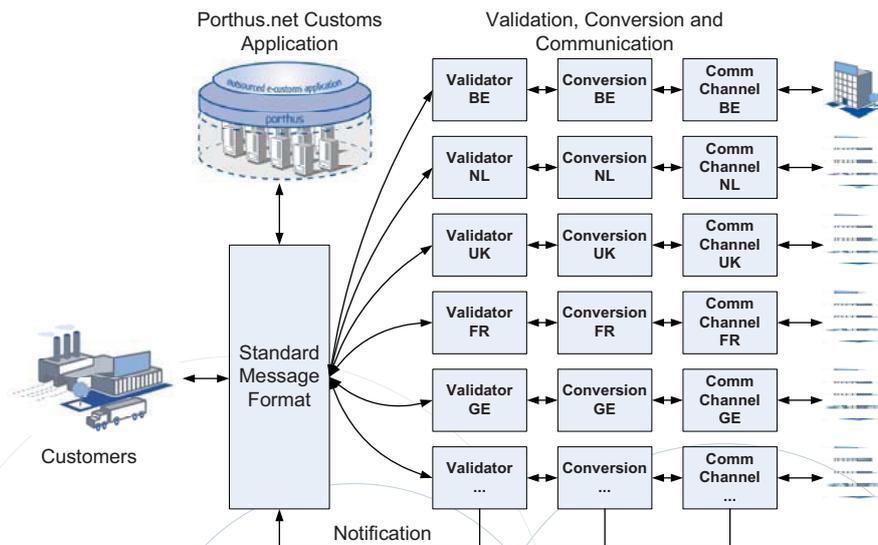


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EU Customs Platform Standard Message Format (SMF)



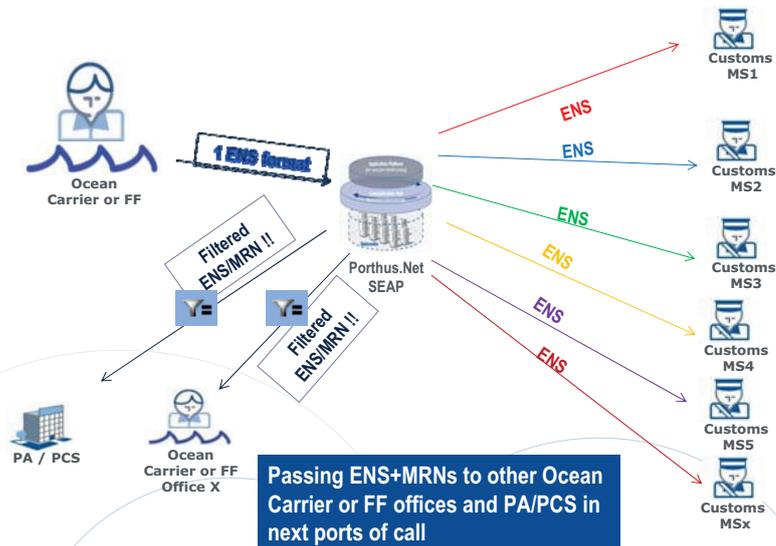
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Single European Window via Porthus.Net – ICS example

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EU BUSINESS TRUST SOLUTIONS



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- Reuse of information;
 - ➔ private sector as enabler
- Reuse of technology and best practises;
 - ➔ Consultation between private sector & authorities; initiative OSCE possible?

