



## **e-Maritime Applications. EU Countries overview**

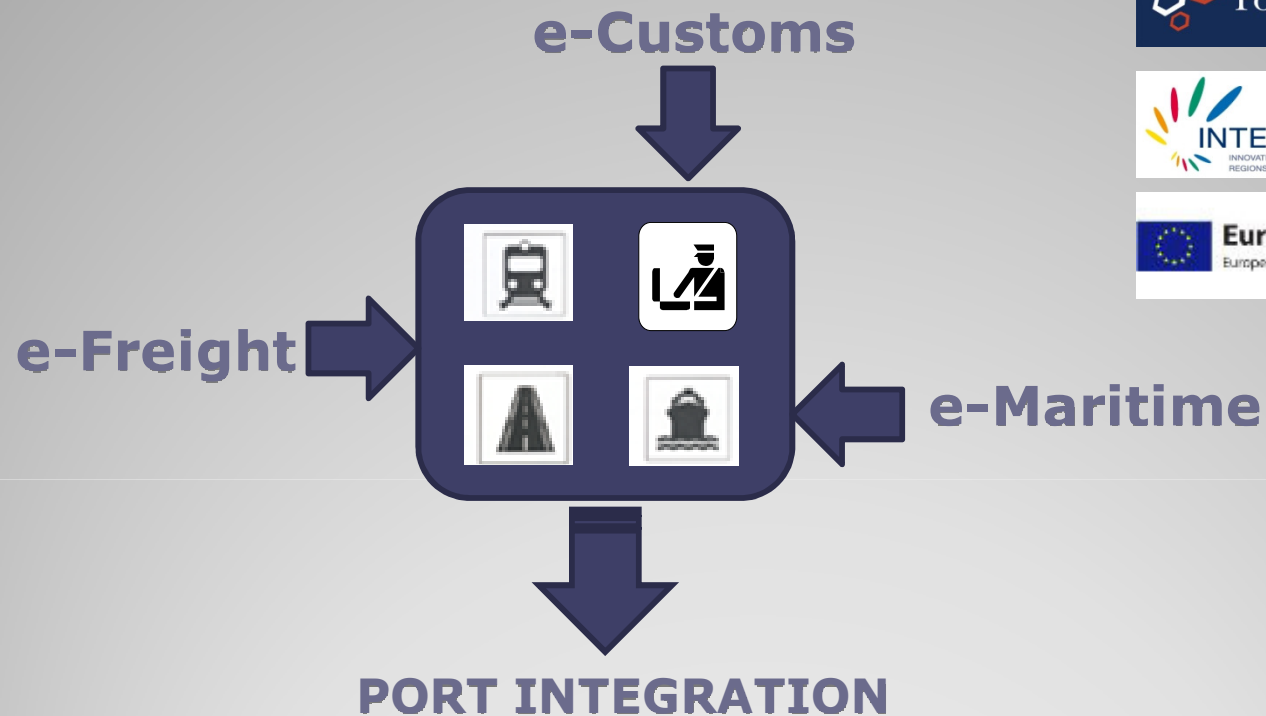
**High Level Black Sea  
eMaritime Summit**

Jose Garcia de la Guia  
Innovation Director  
Port Authority of Valencia

Miguel Llop  
ICT Director  
Valenciaport Foundation

International Conference 11-12<sup>th</sup> October 2010, Varna

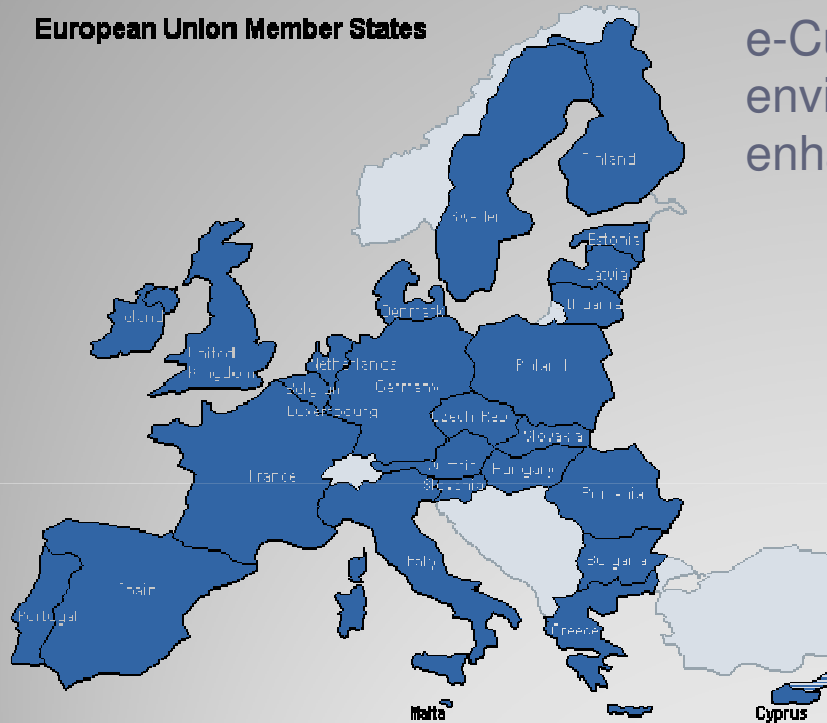
# The EU e-Initiatives



Multi-modal innovation for sustainable maritime & hinterland transport structures is designed to identify, exchange & transfer best practices in the transport sector with the aim of an overall integration of related policies.

# e-Customs

## European Union Member States



e-Customs seeks a more efficient customs environment that will facilitate trade and enhance security.



e-Customs means using digital systems to collect and safeguard Customs duties, to control the flow of goods and to provide security for crime.

The initiative aims to replace paper-based customs procedures with European-wide electronic operations, thus creating a more efficient and modern Customs environment.

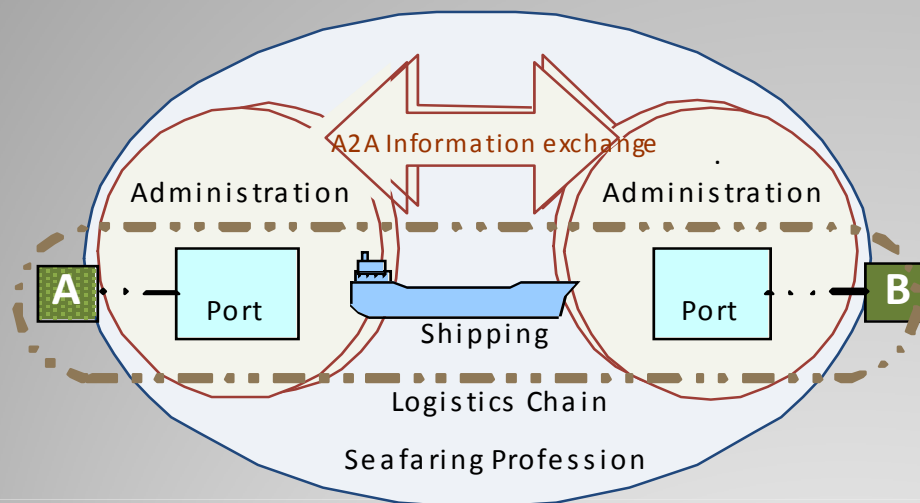
# e-Freight



- e-Freight denotes the vision of paperless freight transport processes where an electronic flow of information is linked to the physical flow of goods.

- Specific objectives of e-Freight include:
  - **Administrative simplification across transport modes.**
  - **Standardisation of information exchanges related to location and other cargo information.**
  - **Secure ways of making supply chain information available on-line to customs, other regulatory authorities and businesses.**
  - **Practical ways of using positioning and communication technologies**

# e-Maritime



- e-Maritime initiative is aimed at fostering the use of advanced IT for working and doing business in the maritime transport sector.
- e-Maritime will focus on promoting interoperability between stakeholders in the maritime transport sector

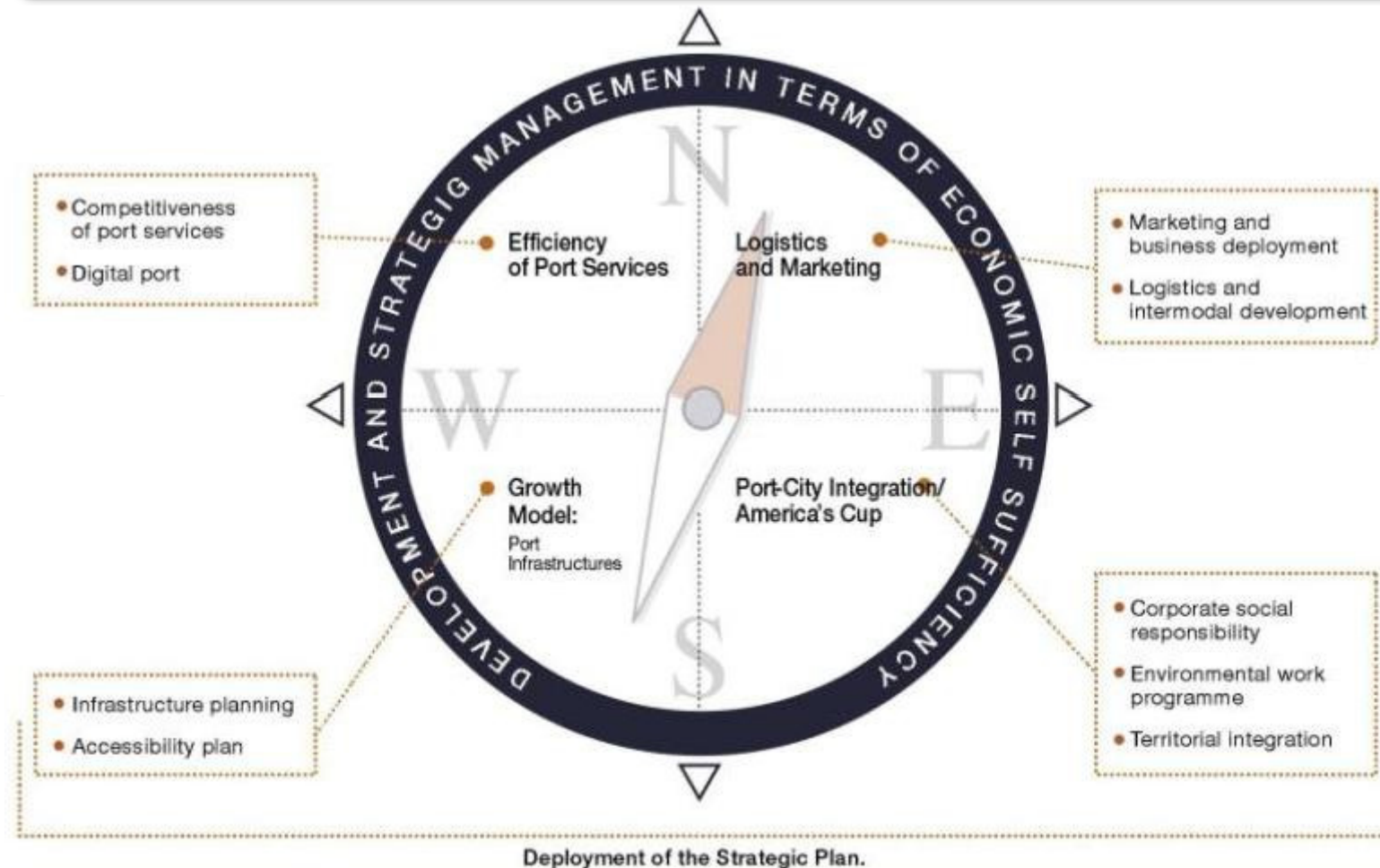
- Objective of the presentation is to share the vision and strategy of the Port Authority of Valencia in the following **application domains**:
  - **Administration**
  - **Port & Terminal operations**
  - **Transport Logistics operations**

- The **Port Authority of Valencia** (PAV) is a **State owned public entity** in charge of the management of **3 ports located along 80 kilometres** of the eastern border of the **Spanish Mediterranean coastline** in the Valencia Region: namely, the ports of **Sagunto, Valencia and Gandia**.
- **VALENCIAPORT** is a registered commercial trademark.



**2009 Valenciaport moved 57.8 Mtons and 3.6 Mteus**

## Focus on 4 Strategic Axes







Talking about **Ports** we can say:

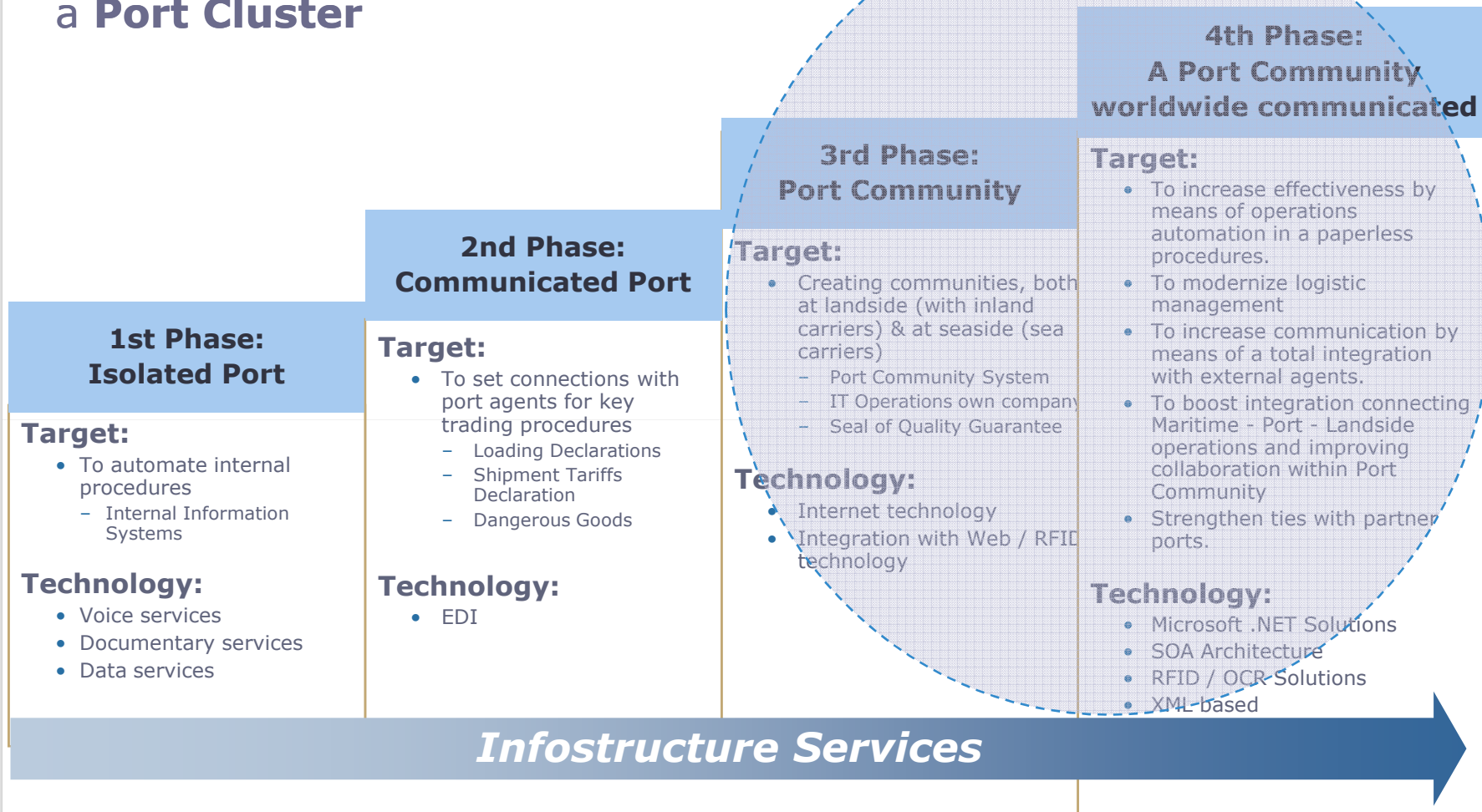
**"Technology is nothing without improving efficiency"**

We'll focus on some High-Tech applications in:

- The **Port Community** as a whole
- **Vessel** Operation
- **Cargo** Load / Unload
- Container **Gate In/Out**
- **Security & Control**: Customs and other authorities

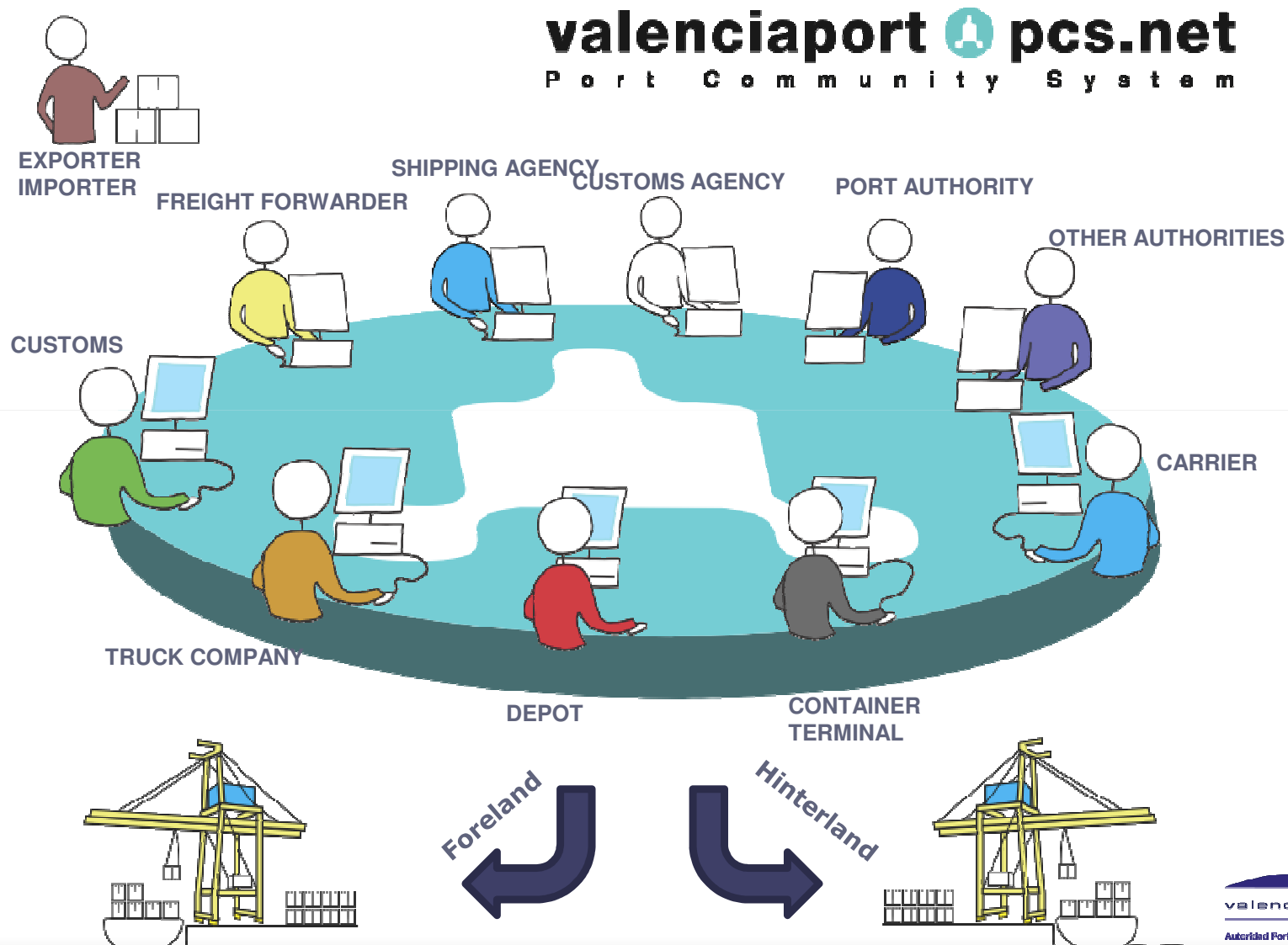


# Port Community ITC Integration from Local to Global helps it grow to a **Port Cluster**

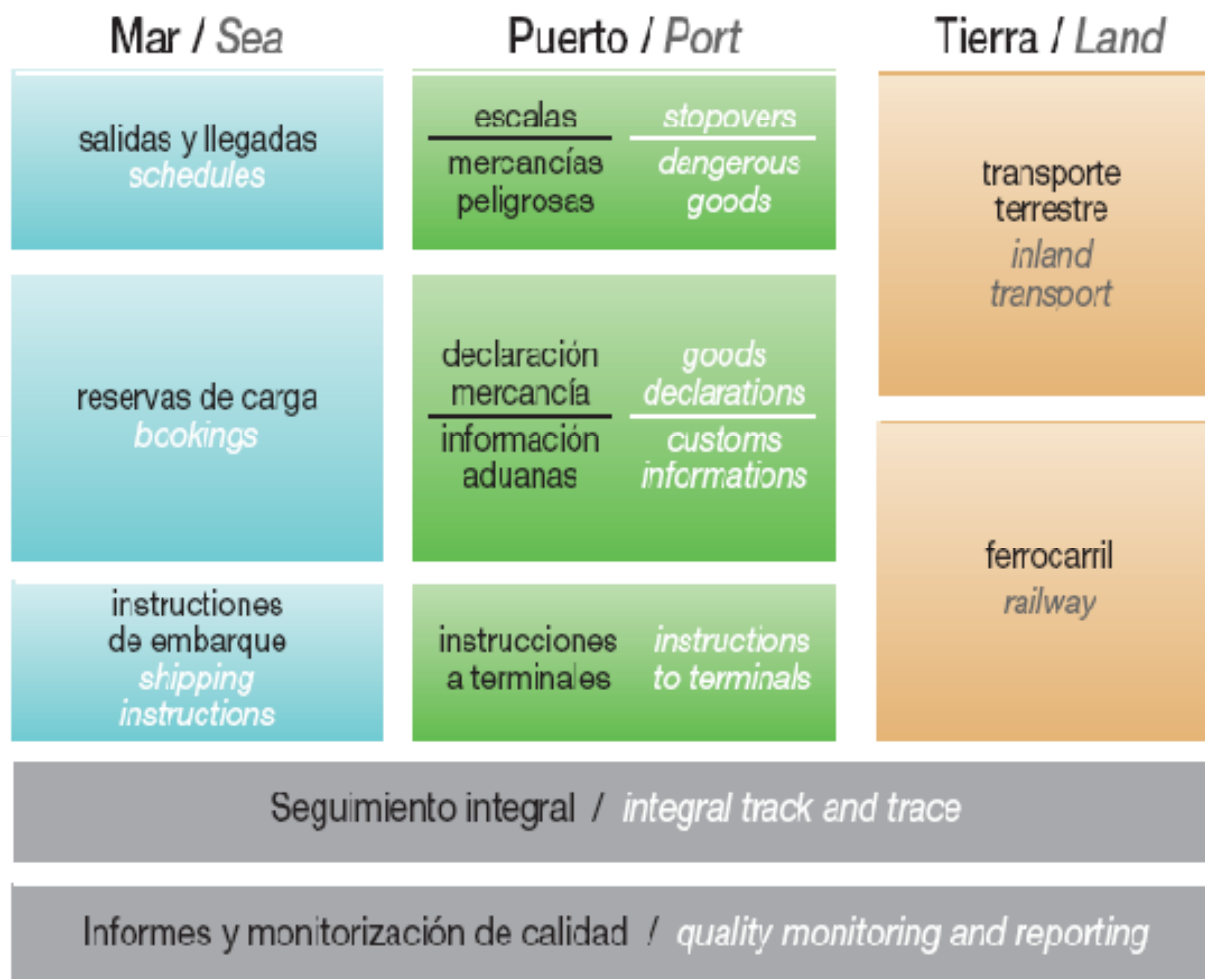


**Efficiency of Port Services – ITC Developments & Implementation**

## All the **Port Community** at the same **Virtual Table**



## Using the same ITC Integrated World ... Speaking the same data language: the Port Community System



## **valenciaportpcs.net is the One-Stop-Point for all the Port Community to share information**

### **Public Administration**

- Single Window: Customs, Port Authority, Maritime Authority, Quarantine Inspection
- Dangerous Goods, Customs Declaration, Cargo Manifest

### **Port Operations**

- Vessel load/unload lists and confirmations
- Crossed information with Public Administration

### **Port Logistics**

- Road & Rail transport e-management
- Linked to the Carriers through INTTRA and GTNexus

Last  
successful  
services



Paperless fully automatic container export Customs control

Goods release from the Port through unattended gates

Road & Rail Transport with on-line information on customs & DG authorisations

100% of container operations pre-notified electronically

# ICS: Import Control System

The security amendment to the Community Customs Code requires member states to introduce new common systems.



AIS – Automated Import System

*Purpose:* Ensure that import operations starting in one member state can be completed in another without re-submitting the same information



ICS – Import Control System

*Purpose:* Perform a risk analysis of goods arriving at the European Union based on pre-arrival information provided by carriers



ENS – Entry Summary Declarations

Effective January 1st, 2011, Community legislation requires that an ENS must be lodged before arrival at the first point of entry into the customs territory of the Community

24 hours  
before loading

- Containerised  
Maritime Cargo

2 hours before  
arrival

- Short Sea Shipping  
• Mediterranean

4 hours before  
arrival

- Bulk/break bulk  
maritime cargo

Actual take off

- Short haul flights

4 hours before  
arrival

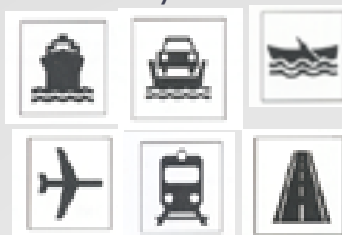
- Long haul flights

2 hours before  
arrival

- Rail and inland  
waterways

1 hour before  
arrival

- Road transport



ALL TRANSPORTATION  
MODES  
DIFFERENT TIME LIMITS

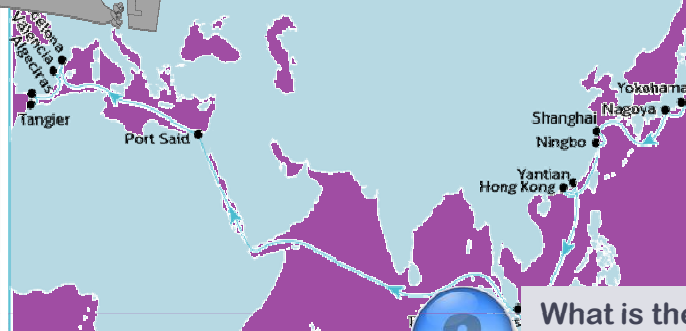
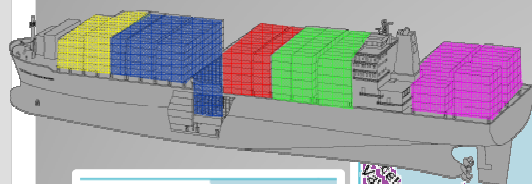


General Principles described in  
document TAXUD/2027/2009:

*Guidelines on entry and import*

# ENS Declarations: Relevant issues

Containerized Deep Sea Shipping: All Container shipments towards the EU must be reported to the EU 24 hours before loading



## What is the Port of loading?

It is where the container is loaded onto the vessel that will arrive at the territory of the Community.

Goods that never show up in the Community do not constitute a security risk and do not require a ENS.

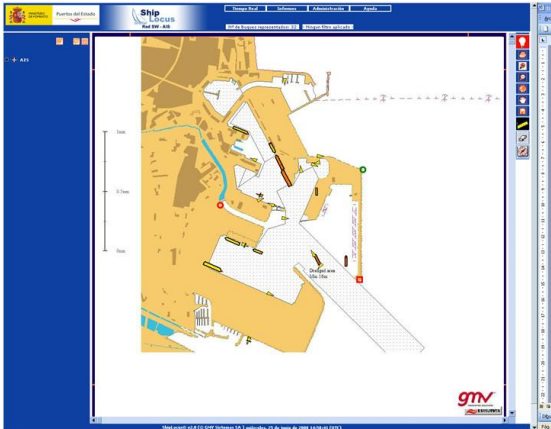


If the vessel, after calling at EU port, makes a call at a non-Community one and then calls again at a Community port  
New ENS must be lodged for the new entrance of the vessel at the Community Territory.  
These new ENS must cover all cargo carried on the vessel.



Feeder services not owned by the mainline carrier from a non-Community port  
What arrangements will be required within mainline carriers and the regional feeder carrier for introducing goods on the Community Territory (i.e. acting as 3<sup>rd</sup> parties declaring ENS)?  
Which transport contracts (i.e. feeder vessel operators non-negotiable receipts, mainline B/Ls, ...) should be informed on the ENS?

# Vessel Operations



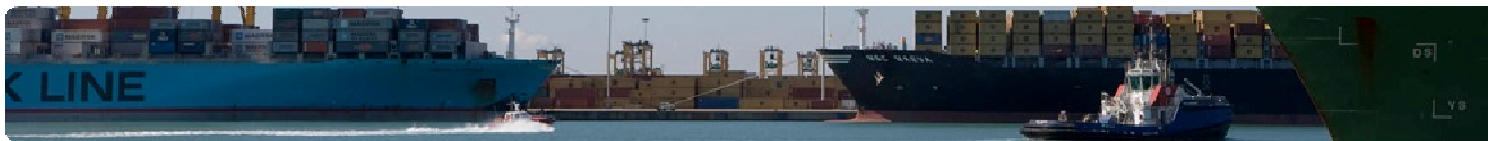
*Fully Operative Vessel  
Traffic System Based on  
AIS Technology*



Synchronized  
Systems

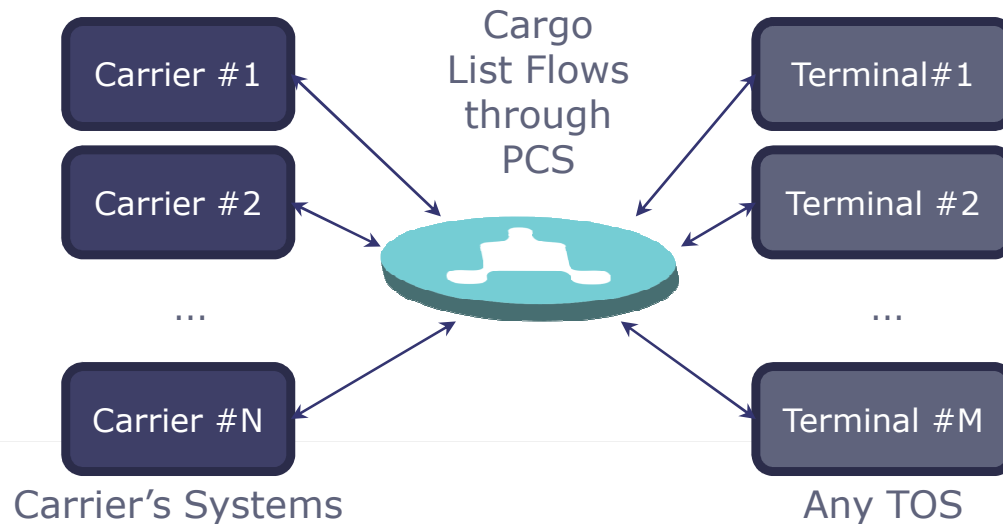
## **PCS Single Window for Call Management:**

- Berth and Anchorage Request and Authorisation
  - Pilots, Tugs and Mooring Request
- Contact to ALL Public Administrations: Port Auth, Maritime Auth, Customs, Police, etc.
- Used on 99,5% vessel calls





# Container Load/Unload



- Each **Carrier** can work with any terminal with the same link and standards → Work becomes **TOS independent**

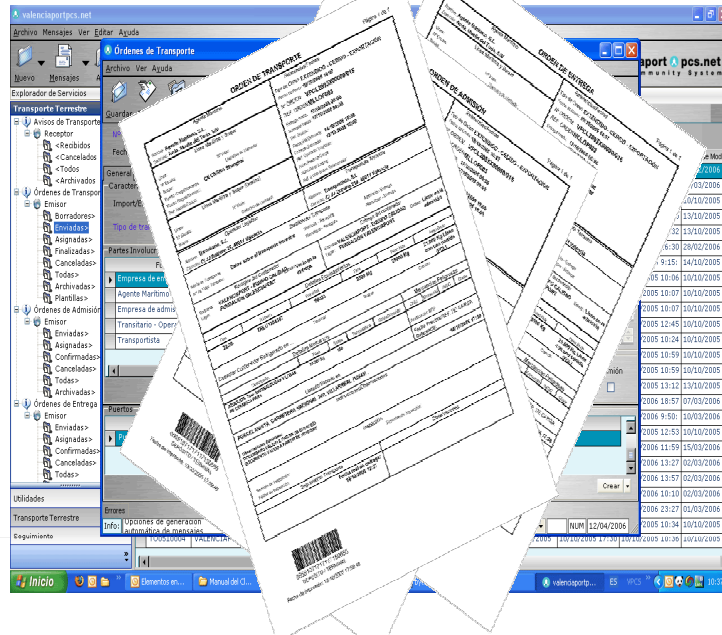
- Cargo Lists are **fed** with additional **information from the administration application domains**: customs status, DG authorizations, Port Authority permission, etc.

## *Case of Success: Automatic Customs Check for Export:*

- Customs Police receives cargo export list in the PCS at the same time that the Container Terminal
- The list is automatically crossed with the customs declarations authorizations using a direct link with Spanish Customs Central System, no authorisation paper is needed
- Checking a 5000 movements list takes only 3 minutes (4 hours before having this tool)



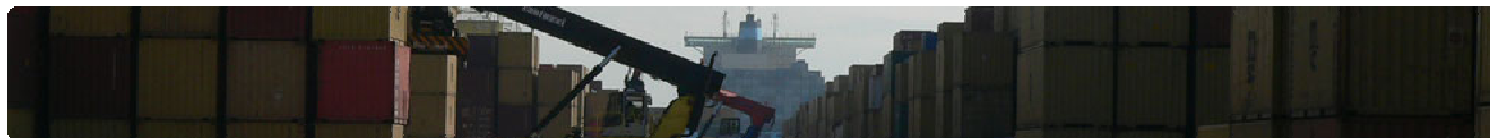
# Gate In/Out



- **99%** of the Gate in/out **movements** in Valencia are managed **electronically**
- The procedure covers all the inland logistic operations in a **single electronic document** including Transport Order, Release Order and Admittance Order.
- There is a **Quality agreement** to send the electronic document the day before.
- The stakeholders involved are: Freight Forwarder, Shipping Line, Truck Company, Container Terminal and Container Depot

## *Case of Success:* No Queues at the Container Terminal Gates

- All the information is at the Terminal System before the arrival of the truck
- The average time at the gate was 5 minutes with the paper procedure, now it is only 35 seconds
- At Maritima Valenciana Terminal (1.8 Mteus) with 4 gates have now more throughput than before with 10 gates



# Security and Control



- The Gates of the Port have control systems including: **OCR** detection of plate number and Container Number, **Radiation** Detection, **RFID** readers for preferential trucks
- 50 additional OCR plate readers are distributed along the Port
- Container terminals use their own systems of OCR and RFID
- The information is **centralized** and merged with **Black Lists** and PCS logistics information, ISPS information is available online

## *Case of Success:* **Unattended Import Customs control**

- OCR gates are linked with Customs through the Port Community System
- The truck gets to Gate and systems queries on trucks Black list and on Customs Authorisation
- The gate opens only in less than 3 seconds → truck doesn't stop



# Full Tracking

## Information Coming From

- Carriers (INTTRA & GTNexus)
- Authorities: Port Authority, Maritime Authority, Customs, Police, etc

## Kind of Information

- Documental Events in the Port
- Logistic Events in the Port and in the Foreland (INTTRA & GTNexus)

## Criteria to query on

- Container Bumber
- Bill of Lading / Booking number
- Vessel Call ID

## Get the Information Through

- PCS Web Site
- Email, RSS or SMS subscription

valenciaport pcs.net  
Port Community System

Descargas | Atención al Cliente

Inicio | Track & Trace | Consulta de Escalas | Subcontratación English

### Track & Trace

User: Registered User Close Session

Search

Container #:

Booking #:

B/L #:

Search

Extended options

Add:

Favorites

- ★ Container # = 'MSCU3692470'
- ★ B/L # = 'MSCUVD345319'
- ★ Port of Origin = 'USMIA'
- ★ Port of Destination = 'ESVLC'
- ★ Vessel = 'CASABLANCA'
- ★ Place of Origin = 'USNYC' and ETA > '01/07/2009'
- ★ Reference 'FF' = '12345434'
- ★ Party 'EX' = 'US Exporter Inc.'

+ Add this Search as Favourite

My subscriptions

To view and to manage your subscriptions, as RSS, email and messaging (IFTSTA events) [click here](#).

#### Track & Trace Results for B/L # 'MSCUVD345319':

ORIGIN	PORT OF LOAD	PORT OF DISCHARGE	FINAL DESTINATION
VALENCIA, ES	VALENCIA, ES	MIAMI, US	ORLANDO, US
03/05/2009	08/05/2009	21/05/2009	23/05/2009

BOOKING #: BN200905080001

B/L #: MSCUVD345319  
MSCUVD3453320  
MSCUVD3453321

VESSEL: MSC CAROLINA

CONTAINERS: 6

TRANSHIPMENTS:

PORT-OF-SPAIN, TT	15/06/2009
CAUCEDO, DO	10/06/2009

REFERENCES:

- AAY (Carrier's Agent Document): AAY12345678
- AGB (Contract Party Reference): AGB12345678
- ANT (Consignee's Reference): ANT12345678
- FF (Freight Forwarder's Reference): FF1234567890
- SI (Shipping Instruction Reference): SI12345678

Print details Subscribe by RSS Subscribe by Email

#### MSCU3692470

TYPE: 20' DRY VAN

Print details

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Expand all Events

LOCATION	EVENT	DATE	VESSEL	VOYAGE
VALENCIA, VC, ES	Berth Departure Authorised	18/05/2009		
VALENCIA, VC, ES	Loaded	17/05/2009	MSC TOKYO	28A
VALENCIA, VC, ES	Terminal Loading Reported	17/05/2009		
VALENCIA, VC, ES	Gate In Full	15/05/2009		
VALENCIA, VC, ES	Container Gate Reported	07/05/2009		
VALENCIA, VC, ES	Transport Instruction Released	07/05/2009		
VALENCIA, VC, ES	Shipping Instruction Confirmed	31/05/2009		
VALENCIA, VC, ES	Berth Request Authorised	26/04/2009	MSC TOKYO	
VALENCIA, VC, ES	DDGG Notification Vessel			
VALENCIA, VC, ES	DDGG Notification Authorised	20/04/2009		
VALENCIA, VC, ES	Booking Confirmed	18/04/2009		

#### MEDU2708780

TYPE: 20' DRY VAN

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LOCATION	EVENT	DATE	VESSEL	VOYAGE
VALENCIA, VC, ES	Berth Departure Authorised	18/05/2009		
VALENCIA, VC, ES	Loaded	17/05/2009	MSC TOKYO	28A
VALENCIA, VC, ES	Terminal Loading Reported	17/05/2009		
VALENCIA, VC, ES	Gate In Full	15/05/2009		
VALENCIA, VC, ES	Container Gate Reported	07/05/2009		
VALENCIA, VC, ES	Transport Instruction Released	07/05/2009		
VALENCIA, VC, ES	Shipping Instruction Confirmed	31/05/2009		
VALENCIA, VC, ES	Berth Request Authorised	26/04/2009	MSC TOKYO	
VALENCIA, VC, ES	DDGG Notification Vessel			
VALENCIA, VC, ES	DDGG Notification Authorised	20/04/2009		
VALENCIA, VC, ES	Booking Confirmed	18/04/2009		



# Thanks

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