



# IX Reunión de la Red Interamericana de Ventanillas Únicas de Comercio Exterior y Facilitación Comercial

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Hotel Sofitel  
Montevideo, Uruguay

## Port Community Systems Global Trends



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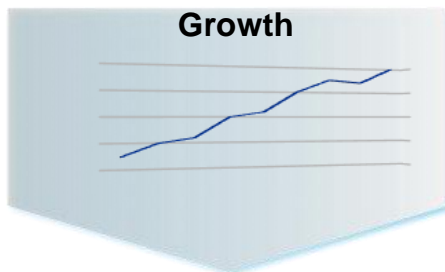
**Port Community Systems – Global Trends**

## **Challenges for ports**

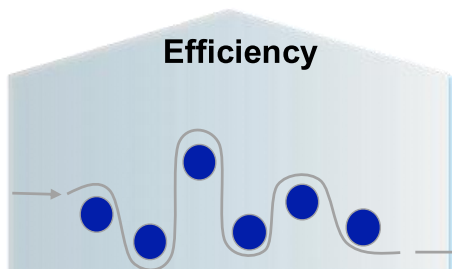
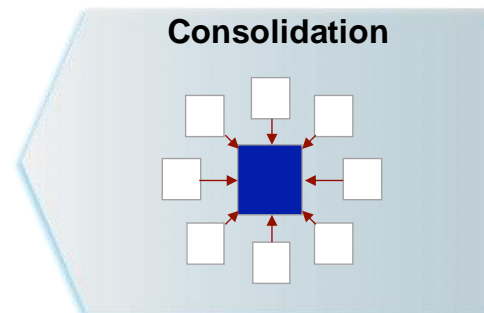


### Port Community Systems – Global Trends

Maritime transportation is undergoing more change in recent years than it has in the past hundreds of years. **Leading ports have also reacted to these port challenges by investing in technology...**



# Port Challenges





**Port Community Systems – Global Trends**

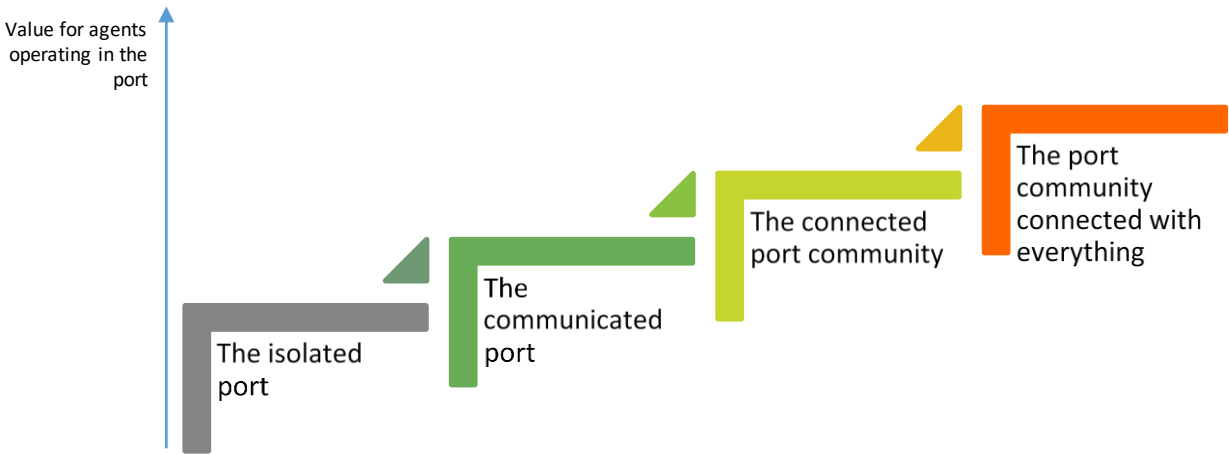
# **Understanding Port Community Systems**

**managing complexity**



### Port Community Systems – Global Trends

**Port Community Systems** are the result of a long process

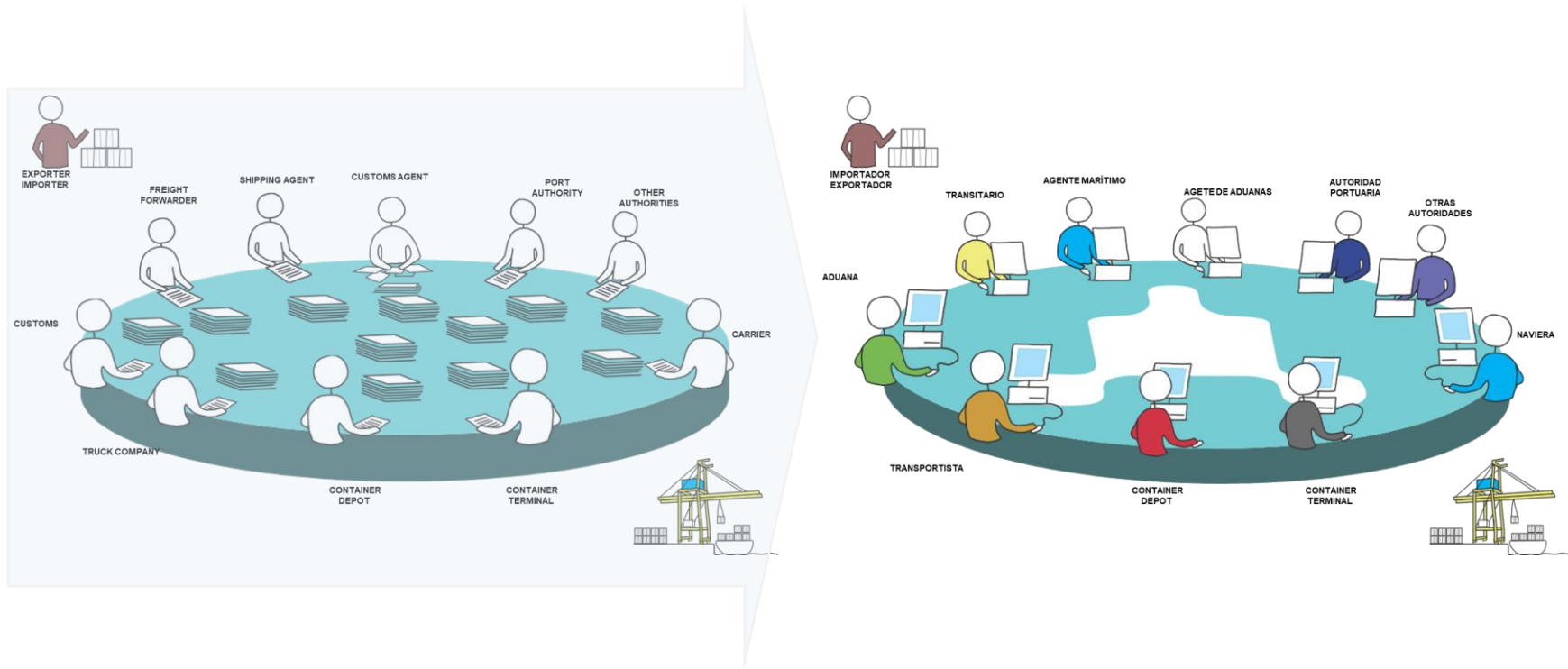


*The four phases of the port digital transformation process*



## Port Community Systems – Global Trends

Information flows around a modern seaport are very complex, involving a large number of agents and generating much paperwork. (Each TEU movement requires multiple communications among members of the port community, thus creating a complex information web).



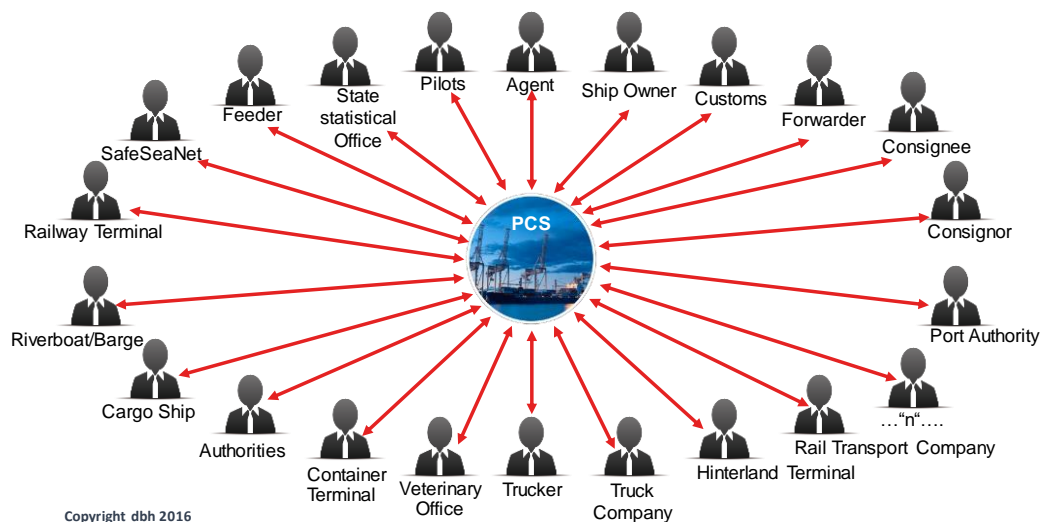


## Port Community Systems – Global Trends

According to the IPCSA a **Port Community System** is:

- a **neutral and open electronic platform enabling intelligent and secure exchange of information between public and private stakeholders** in order to improve the competitive position of the sea and air ports' communities;
- optimises, manages and automates port and logistics efficient processes through a **single submission of data** and connecting transport and logistics chains.

### A TRUSTED THIRD PARTY





## Port Community Systems – Global Trends

### PCS - key aspects

- **Neutral** Electronic Exchange platform
- **Trusted third party** (stakeholders from the community)
- Relatively low development cost and operating costs
- **Low cost solution for users**
- A community solution created by Information technology
- **Not a Software** solution
- **Tailored/customised solutions**
- **Always evolving** and adapting to new requirements and challenges...
- **Community led** trade facilitation tool
- Links trade operational processes and administrative procedures
- **Reduces interfaces required** by public administrations as they can use PCS as main exchange platform





## Port Community Systems – Global Trends

### PCS - key aspects

Target (Users/Customers)	Business Model	Operation Model	Services
Port Operators Authorities: Port Authority Customs Harbour Master Coast Guard Immigration Sanitary Inspection ...	Fully Private	Fully Private	Extension of TOS
Shipping Lines	Mixed		
Line Agents			
NVOCC		Mixed	Wide Range
Container Terminals			
Container Depots	Local / Port Authorities		
Road /Rail / River Operators		Public Authorities	B2G / Single Window
Forwarders	National Authorities		
Logistic Operators			
Inland Terminals			
Customs Brokers			
Shippers			

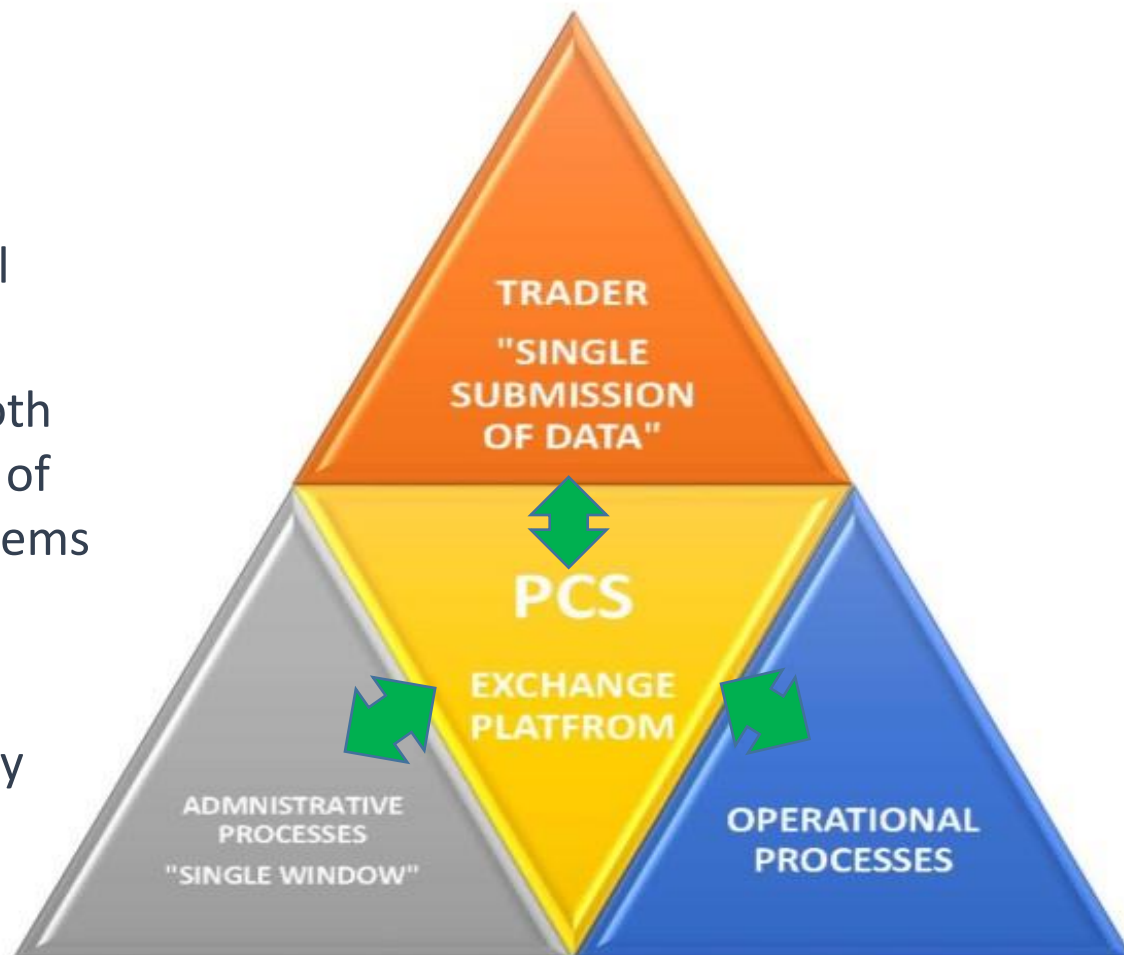


## Port Community Systems – Global Trends

### PCS – Trade Facilitation tool

a PCS:

- Links administrative processes to operational ones
- Thus re-using data for both purposes and the re-use of existing Information Systems
- Creating Transparency & reducing trade burdens
- Can also act as a Gateway into a Single Window





## Port Community Systems – Global Trends

### PCS – Trends

### Community Systems are:

- Becoming an integral part of Trade Facilitation and gateways into Single Window.
- PCS are, in some countries emerging as the Trade Single Window
- Connecting globally to increase transparency
- Connecting locally to improve coordination between different transport modes – Air, Sea, Land, River
- Developing new services based on new technologies (IoT, Big Data, Blockchain, etc.)



**Port Community Systems – Global Trends**

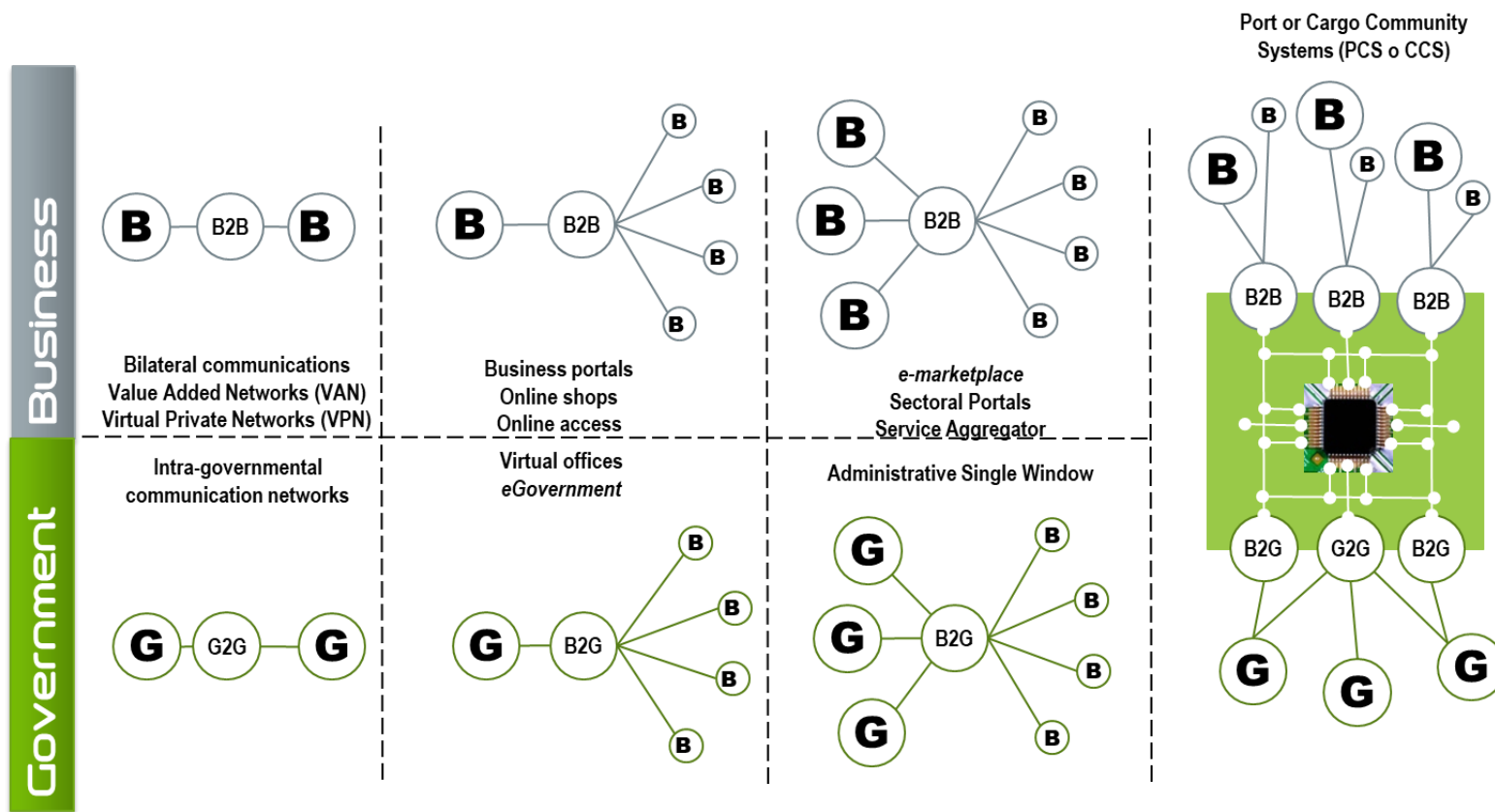
**PCS & SW  
a Single Environment**

**interconnectivity between systems**



### Port Community Systems – Global Trends

The wide variety of IT tools around port and trade operations involves an increasing need for **connectivity** and **interoperability** at intra-organization and inter-organization levels but also at intra-government and inter-government levels. ICT tools for **sharing information and collaborating** are a resource of vital importance for the effective and efficient performance of port and trade activities.

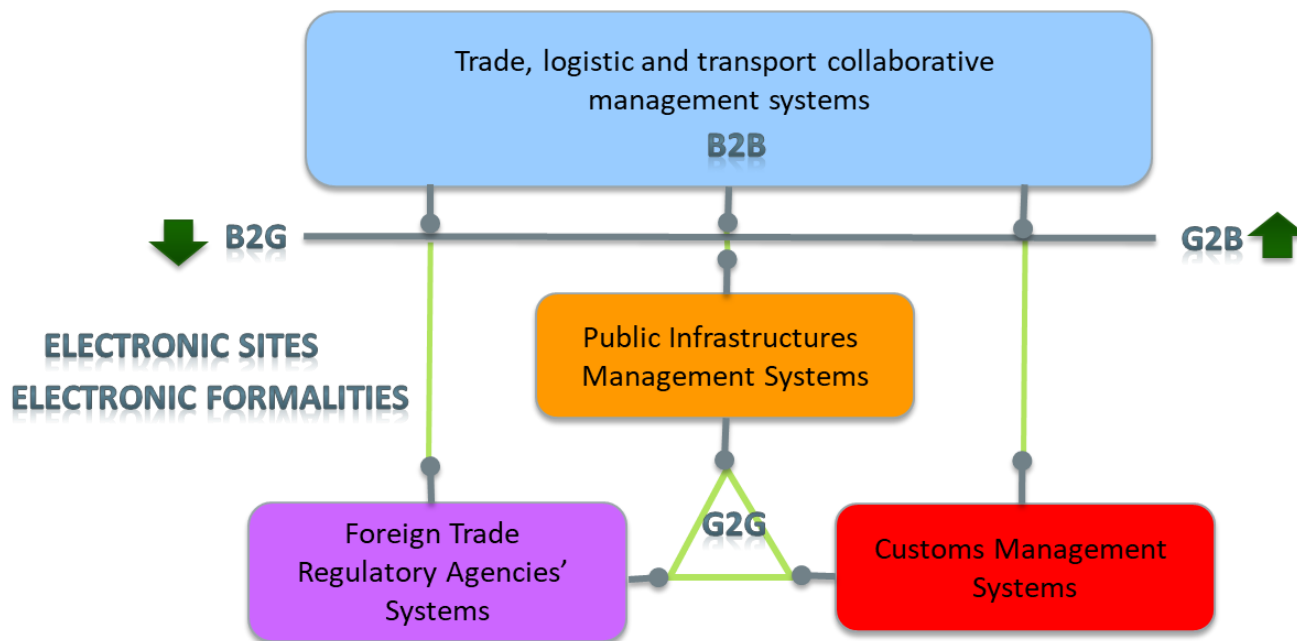


*Typologies of sharing and collaborative information systems*



### Port Community Systems – Global Trends

The creation of a **Single Window Environment** can be achieved through the contribution and interoperability of single submission portals for trade, logistics and transport (i.e. **PCS** or **CCS**), single windows or single submission portals provided by public infrastructure authorities or operators (i.e. **maritime single window**), single windows or single submission portals provided by foreign trade regulatory agencies and public bodies (i.e. **trade single windows**, agencies and public bodies virtual offices) and customs systems for filing different customs declarations (i.e. **eCustoms**).

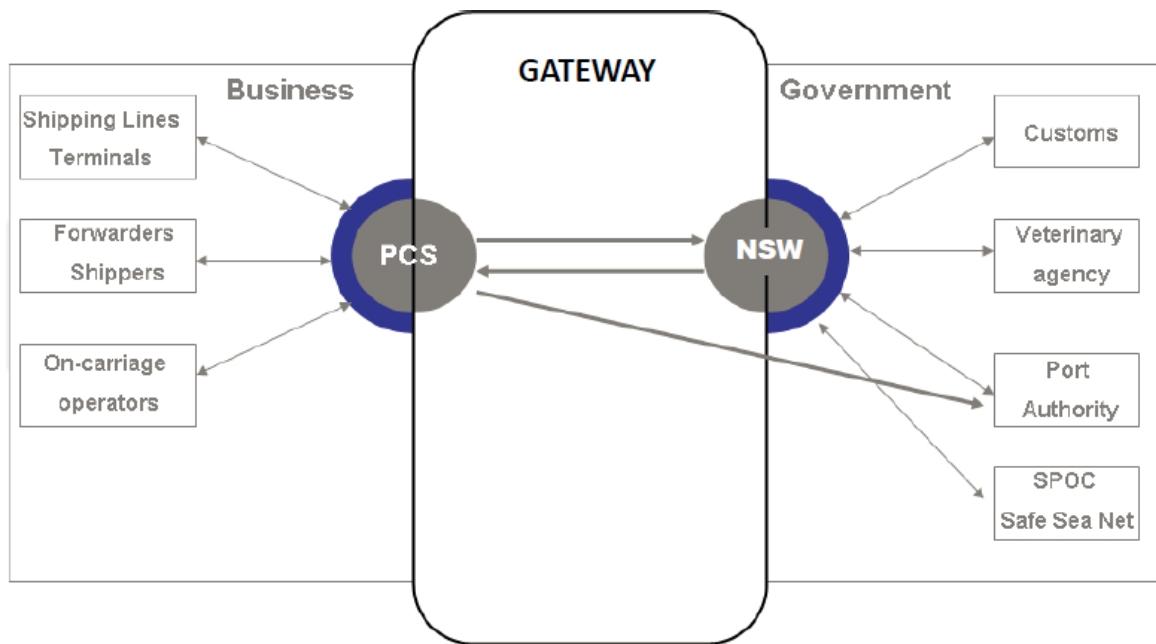


*Consecution of a Single Window Environment*



### Port Community Systems – Global Trends

It is important to take into account that **PCS systems are not intended to substitute Single Windows but to complement them** facilitating the Business to Business communications to coordinate logistics and transport operations and facilitate the preparation of the different formalities to be presented through single windows and/or government single submission portals.



*PCS as platforms to access single window systems - IPCSA*

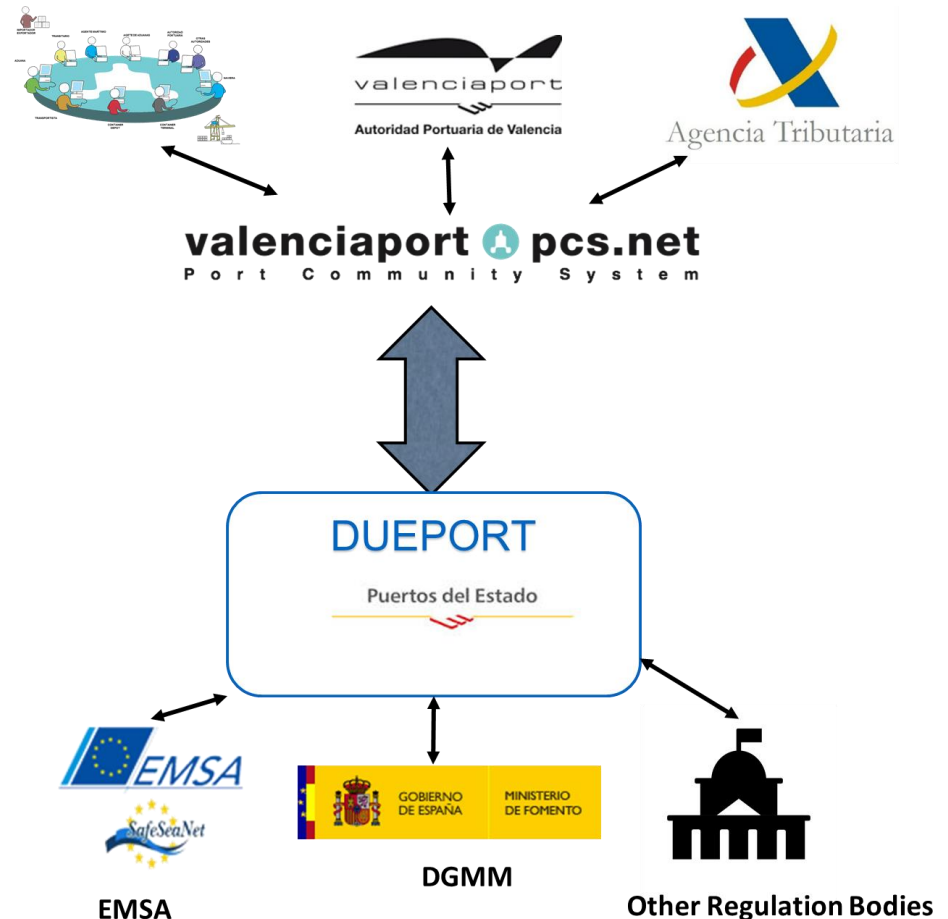
## Port Community Systems – Global Trends

Example:

**valenciaport PCS**  
PORT COMMUNITY SYSTEM

### REPORTING FORMALITIES DIRECTIVE 2010/65/EU

The directive 2010/65/EU aims to **simplify and harmonise** the administrative procedures applied to **maritime transport** by establishing a **standard electronic transmission** of information and by rationalising **reporting formalities for ships arriving in and ships departing** from European Union (EU) ports.







**Port Community Systems – Global Trends**

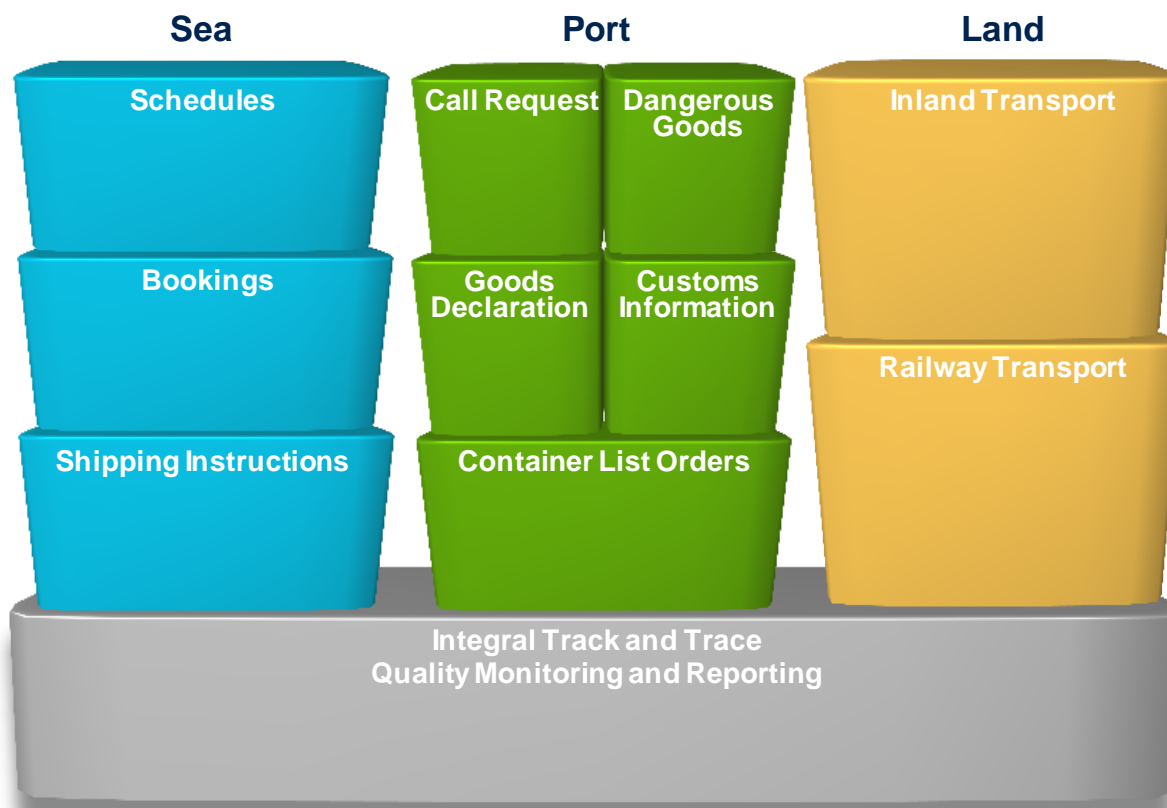
**Adding Value**

**saving money**



### Port Community Systems – Global Trends

Example:





## Port Community Systems – Global Trends



### Paperless automatic customs check for export and transhipments (Container List orders for Load/Unload)



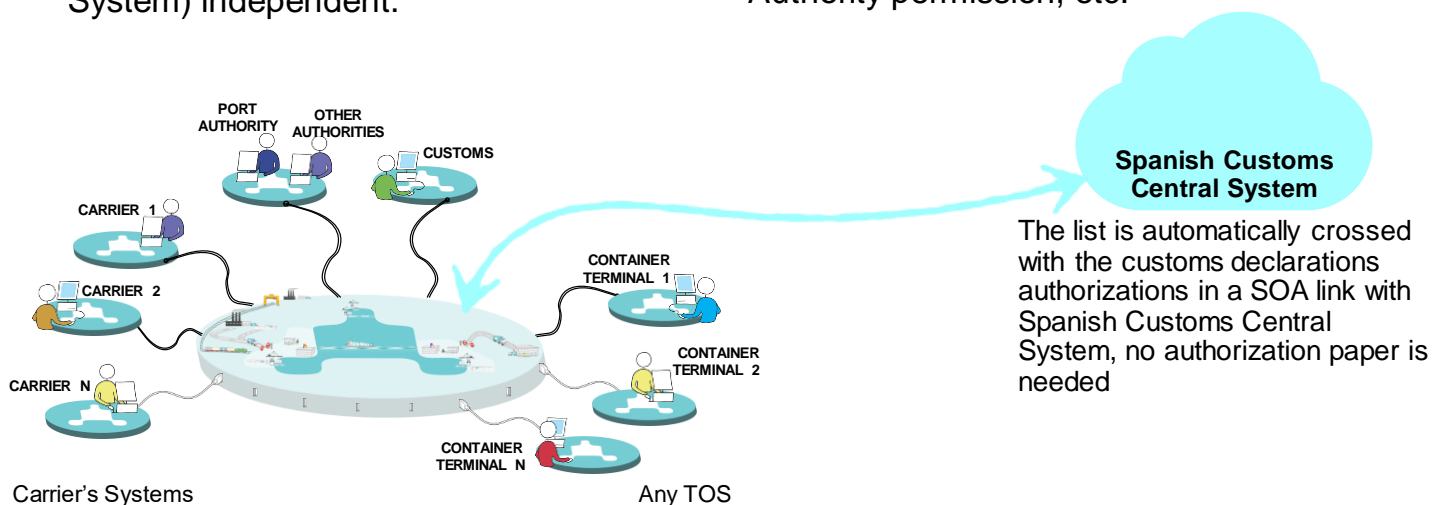
Permits shipping agents and carriers to send the vessel loading and discharge lists to the container terminals and obtain the respective confirmations of the loading and discharge of the containers figuring on these lists from the terminals.

#### TOS independent

Each Carrier can work with any terminal with the same link and standards. Work becomes TOS (Terminal Operation System) independent.

#### Rich Data

Cargo Lists are fed with additional information to carrier and terminal ones: customs status, DG authorizations, Port Authority permission, etc.

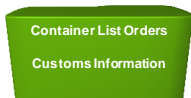




## Port Community Systems – Global Trends

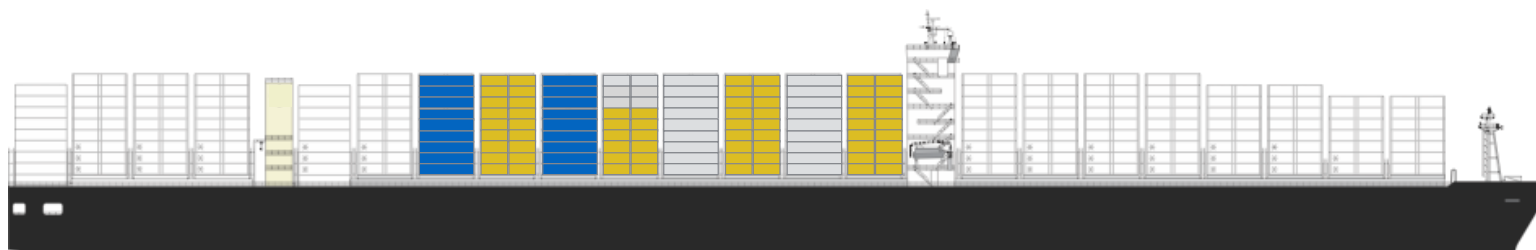


### Container List orders for Load/Unload (with Automatic Customs Check for Export and transshipments)



#### Efficiencies and benefits

- **Checking a list of 5000 movements took 4 hours before having this tool.**
- **Now only 3 minutes.**
- **Time required to verify the transhipped containers of a vessel has been reduced by ten times both for the shipping agencies and the customs' police.**



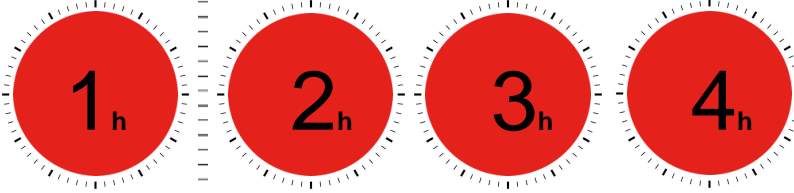


## Port Community Systems – Global Trends

**valenciaport**  **PCS**  
PORT COMMUNITY SYSTEM

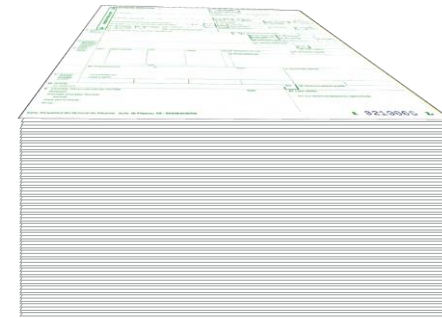
Customs Information

Matrícula	Peso bruto	Booking	Por. Descarga	Lugar destino	Tipo de contenedor
MEDU137414	1250	123402373	MXVER - Veracruz	MXVER - Veracruz	4310 - DV Cios.vermel. Pass
MEDU799263	2066	123402353	MXATM - Atlanta	MXATM - Atlanta	4310 - DV Cios.vermel. Pass
MEDU803213	19206	123402373	MXVER - Veracruz	MXVER - Veracruz	4310 - Gen. purpose without
MEDU482730	8857	123402378	MXVER - Veracruz	MXVER - Veracruz	4310 - Gen. purpose without
INLU6903581	14800	123402020	MXVER - Veracruz	MXVER - Veracruz	4310 - Gen. purpose without
MEDU532101	4300	123402279	BSFPD - Freeport, Grand Bahama	CLAMP - Veracruz	2211 - Opening, Opening or
MEDU930347	5418	123402293	USPEF - Ft Everglades	MXPMS - Puerto Morelos	2201 - Gen. purpose without
MEDU797523	7380	123400234	MXVER - Veracruz	MXVER - Veracruz	4310 - Gen. purpose without
MEDU995756	8100	123402164	USPEF - Ft Everglades	USPEF - Ft. Everglades	2210 - DV Cios.vermel. Pass
INLU6903587	6669	123402345	MXVER - Veracruz	MXVER - Veracruz	4310 - DV Cios.vermel. Pass
TCML9632773	6619	123402044	MXVER - Veracruz	MXVER - Veracruz	4310 - DV Cios.vermel. Pass
TCLJ548564	8784	123402197	MXVER - Veracruz	MXVER - Veracruz	4310 - DV Cios.vermel. Pass
MEDU792820	2244	123402192	MXVER - Veracruz	MXVER - Veracruz	4310 - DV Cios.vermel. Pass
FSCU397834	6900	123402297	USPEF - Ft Everglades	USPEF - Ft. Everglades	2210 - DV Cios.vermel. Pass
TGJH4127209	10500	123402323	US4DL - Houston	USH-DJ - Houston	4310 - DV Cios.vermel. Pass
GSUT7749374	13266	123402893	USPEF - Ft Everglades	USPEF - Ft. Everglades	4310 - Gen. purpose without
MEDU812285	11979	123402273	MXVER - Veracruz	MXVER - Veracruz	4310 - DV Cios.vermel. Pass
MEDU1994627	11370	123402270	BSFPD - Freeport, Grand Bahama	USMOR - Mobile	2210 - DV Cios.vermel. Pass



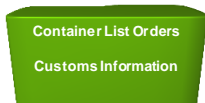
MEDU994432	20410	123402979	MXVER - Veracruz	MXVER - Veracruz	2210 - DV Cios.vermel. Pass
MEDU801243	20410	123402979	MXVER - Veracruz	MXVER - Veracruz	2210 - DV Cios.vermel. Pass
TGJH2353288	22300	123402979	MXVER - Veracruz	MXVER - Veracruz	2210 - DV Cios.vermel. Pass
TRB_J894550	20380	123402979	MXVER - Veracruz	MXVER - Veracruz	2210 - DV Cios.vermel. Pass
MEDU809330	20410	123402979	MXVER - Veracruz	MXVER - Veracruz	2201 - Gen. purpose without
GLU9874824	20410	123402424	MXVER - Veracruz	MXVER - Veracruz	2210 - DV Cios.vermel. Pass
MEDU845541	8562	123400244	MXVER - Veracruz	MXVER - Veracruz	4310 - DV Cios.vermel. Pass
MEDU9373226	8632	123400242	MXATM - Atlanta	MXATM - Atlanta	4310 - DV Cios.vermel. Pass
TCML7073626	8192	123400244	MXVER - Veracruz	MXVER - Veracruz	4310 - DV Cios.vermel. Pass

14 Declaración Representante		N°	
18 Identidad y nacionalidad medio transporte a la partida			
21 Identidad y nacionalidad medio transporte activo en frontera			
25 Modo transporte en frontera		26 Modo transporte interior	27 Lugar carga
3 29 Aduana de salida			30 Localización de las mercancías
31 Bultos y descripción de las mercancías		Marcas y numeración - N.º contenedor(es) - Número y clase	
INKU6563997			
34 Indicaciones especiales (documentos presentados/ certificados y autorizaciones)			
37 Cálculo de los valores			
Clase	Base imponible	Tipo	Importe





### Port Community Systems – Global Trends



### Savings (in time)

The following table reflects typical process time instances measured in minutes

Process	Agent Involved	Former situation (min/consignment)	Current situation (min/consignment)
<b>Prepare Customs Documentation</b>	Shipping Agency	<b>5,4</b>	<b>0,4</b>
<b>Check Customs Documentation</b>	Customs' Police	<b>4,0</b>	<b>0,3</b>
<b>Prepare Customs Documentation</b>	NVOCC	<b>6,6</b>	<b>0,6</b>
<b>Solving Errors</b>	All Agents	<b>30,0</b>	<b>0,5</b>
<b>Total</b>		<b>9,4 to 46,2</b>	<b>0,9 to 1,1</b>





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Global Trends

**Gracias por su atención**



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