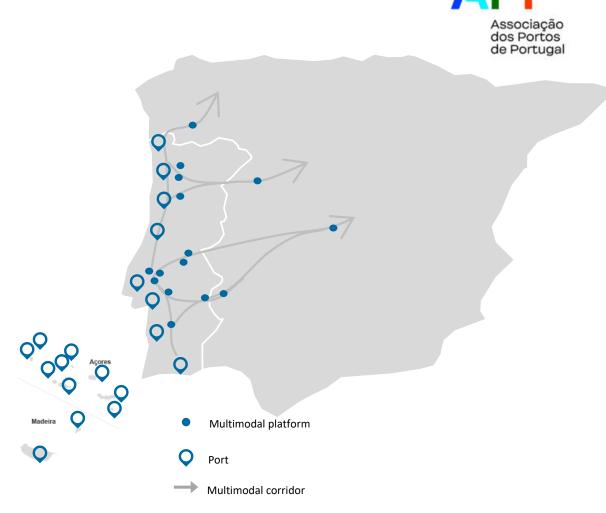


# The Portuguese PCS and Maritime Single Window

- Owned by the Portuguese ports
- Used in numerous ports in Portugal and in
  - Angola
  - Cape Verde
  - Cyprus
- Developed, implemented and supported by
  - ◆ Indra
  - Marlo
  - EGAPI





# Connected Stakeholders (in Portugal)

#### **Ports**



Porto de Lisboa











#### **Authorities**



































**Logistics Companies** 





























### PCS: Linking all Stakeholders

- Shipping Agencies
- Port Authority providing Safety (Coordination, Piloting, Environment) and Port Business (Cargo and Cruises)
- Other official entities in the port (Customs, Cross Border, Emergency, etc).
- Companies that provide mooring services
- Tugging companies
- Companies that provide waste collection services
- Importers / Exporters
- Port operators
- And more







### PCS: Vessel Calls – Report Information



- Call announce (IMO and EMSA Formalities)
- Ship entrance Authorities' Clearance
- Manage Manoeuvres
- Safety and Environmental processes
- Security (ISPS Code)
- Extracting information from EMSA Common Vessel Database
- Cargo Management
- Vessel services and utility supply management





### PCS: Reporting Formalities – IMO FAL FORMS and EMSA



- Pre-arrival notice
- Crew and passengers' lists
- Dangerous goods
- Ship's stores
- ISPS Declaration
- Waste disposal
- Cargo declaration and cargo manifests



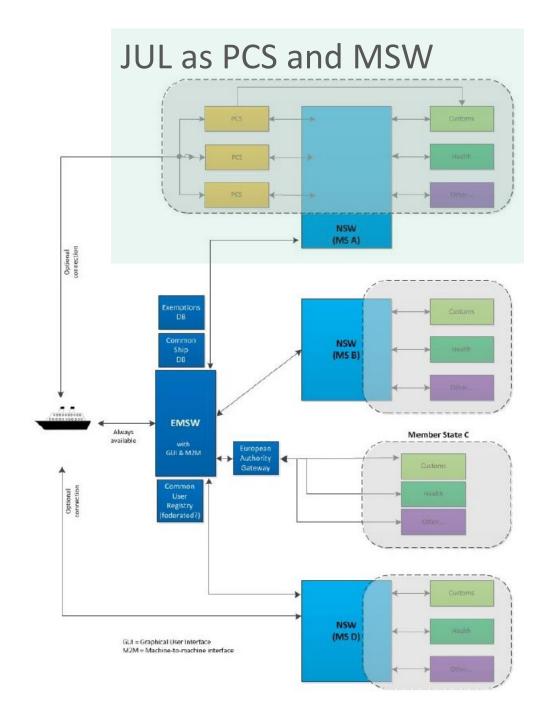


# **Sharing Information**

Directive EU/65/2010



EU Regulation (2019)







### **Some Statistics**

JUL Indicators (26.05.2023)	APRAM	FARO	PORTIMÃO	AVEIRO	FIGUEIRA F.	SINES	SETÚBAL	LISBOA	VIANA	PA	Total
Vessel Calls	5 306	98	392	3 233	1 461	6 262	4 250	4 546	309	4 371	30 228
Truck Calls	0	0	0	0	0	22 581	0	0	0	146 117	168 698
Messages created	373 127	87 450	142 467	433 603	142 927		891 341	820 608	35 859	1 761 460	4 688 842
Pre-invoice created	4 604	716	704	18 881	8 696	29 072	28 910	23 804	1 996	62 554	179 937
Entities	4 436										
Users	12 868										

Train calls indicators	Medway	Takargo	Total
Train calls	46 248	873	47 121

TOS	Containers moved	
Containers moved	1 651 141	

Messages processed	Number	
Total messages processed	17 000 000	

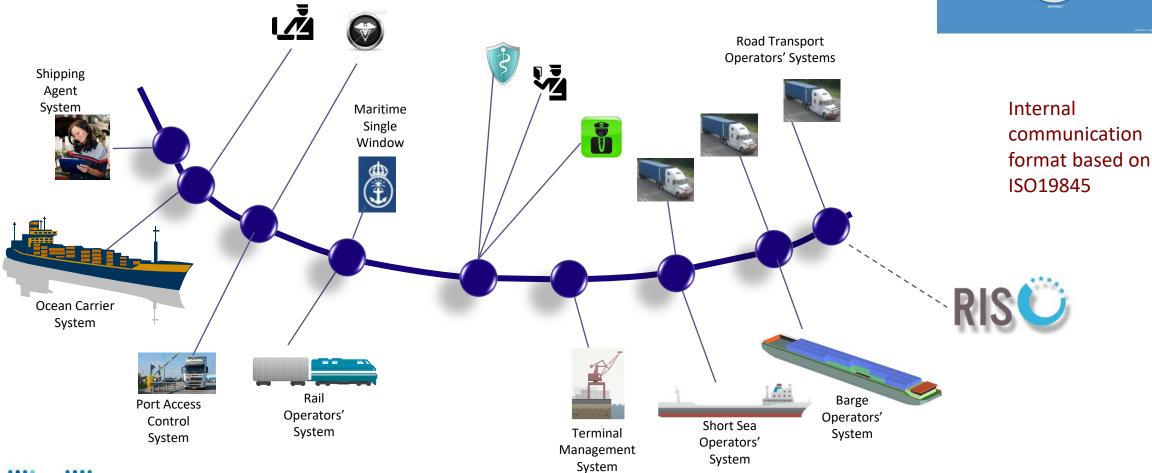




#### Architecture

Based on the principles of the EU eDelivery Infrastructure





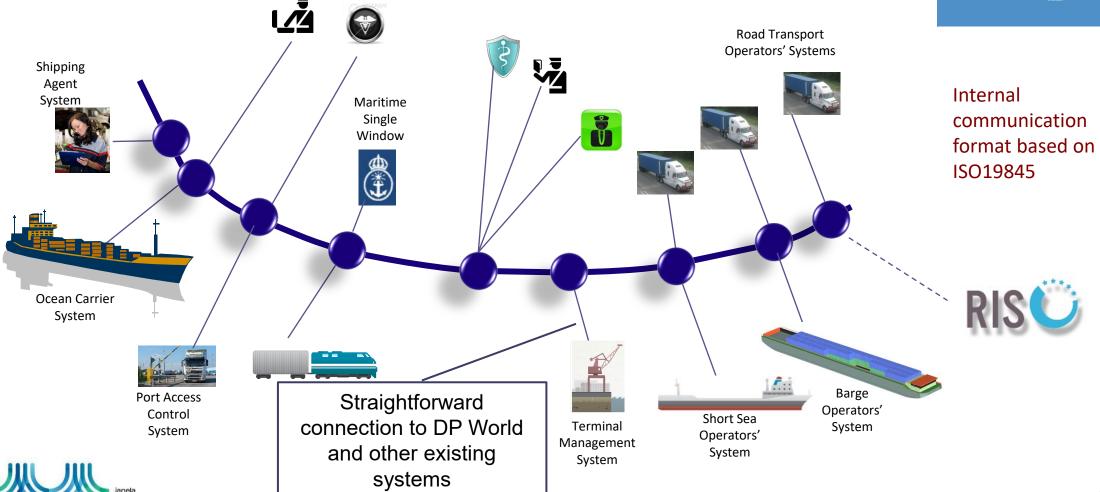




#### Architecture

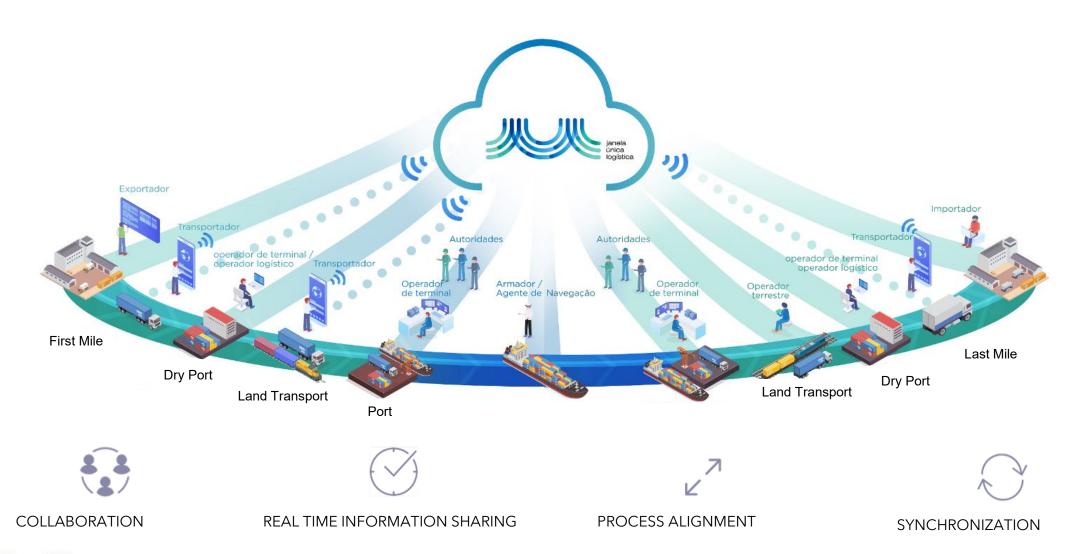
Based on the principles of the EU eDelivery Infrastructure







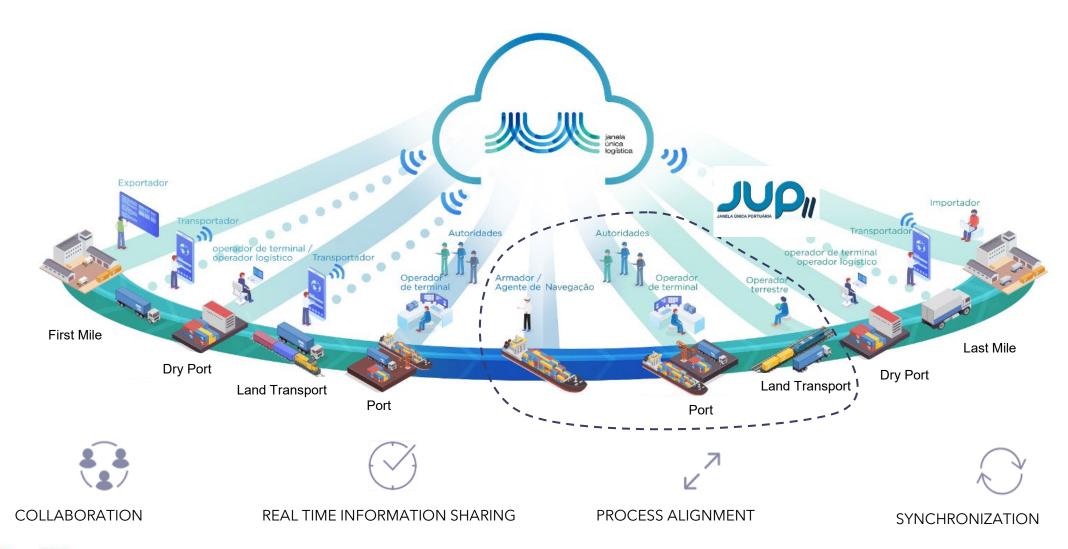
# JUL Scope







# JUL Scope (PCS and MSW)







# Application Components: Full Scope



















### Application Components: PCS and MSW Only







# **Application Components: Linking to RIS**







# **Application Components: Added Security**

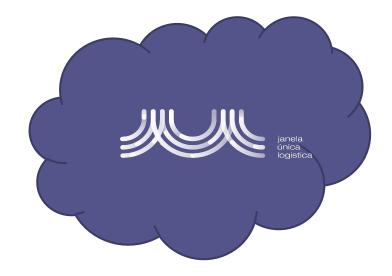






# Implementation Alternatives

In the cloud



Local Servers



- State-of-the-Art
  - Methodologies
  - Technologies





