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# DOCKSTHEFUTURE defining the concept of "Port of the Future" 24 November 2020 Digital conference

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# APDL – PORT AUTHORITY OF DOURO, LEIXÕES AND VIANA DO CASTELO







# **APDL Port Cluster**



- 20 Million Tons
- 686 Thousand TEU
- 2,775 ocean ship calls, including up to 101 Cruise ships
- Exports to 180 countries (5,7 million tons loaded for export)
- 11% GDP North region
- 6% National GDP
- 11% Employment North region
- 6% National Employment
- 20% Foreign Trade by Sea
  DTF





# **LEIXÕES: MULTIPURPOSE PORT**

CONTAINER TERMINALS



CRUISE TERMINALS



RO-RO TERMINALS

OFF-SHORE OIL TERMINAL



AGRI-BULK





BREAK-BULK TERMINAL



SOLID BULK TERMINAL





TERMINAL FISHING PORT









#### **INDUSTRIAL PORT – Shipyard**



#### **COMERCIAL PORT**



200 100

#### **RECREATIONAL PORT**

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#### **INDUSTRIAL PORT – Enercon factory**



# PORT FACILITIES AT VIANA DO CASTELO



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## **DOURO INLAND WATERWAY**

ALC: NO.





Ports & Inland Waterway Port Single Gate (3PL + APP Rodovia) Port Community Systems Port Single Window (JUP) River Information Services JUP DOURO + DIW Portal







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### PORT SINGLE WINDOW (PSW)

PSW IS AN ELECTRONIC PLATFORM THAT IMPLEMENTS THE CONCEPT OF A VIRTUAL ONE-STOP SHOP. IT IS A SINGLE POINT WHERE THE PORT ENTITIES AND ECONOMIC AGENTS SHARE THE RELEVANT INFORMATION OF PORT PROCESSES (CARGO AND SHIPS)

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#### Freight Shippers Operators Others Adents Brokers Forwarders JUP PLATFORM Port Service Authority Desk Hosted at the Port Authority Veterinary Others Immigration Master Control Control SDS SIAM PUBLIC INSTITUTIONS Portuguese Customs Authority Portuguese Maritime Authority

### PORT SINGLE GATEWAY

### ACCESS CONTROL CARGO, VEHICLES AND DRIVERS

► Gate waiting time : **11 min** ► Time at port : **45 min** 



APP RODOVIA Mobile APP – Customer (Truck driver) engagement

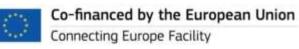




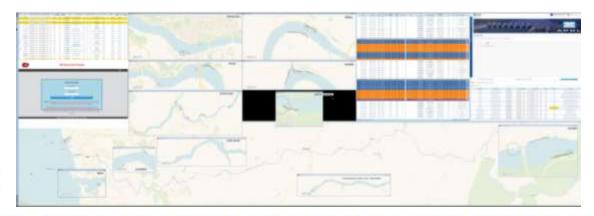
## **River Information Services**

- Fairway Information
- Traffic information
- Crisis management
- Logistics and multimodal information
- Information to be shared with authorities.









# Tomorrow

# Future challenges



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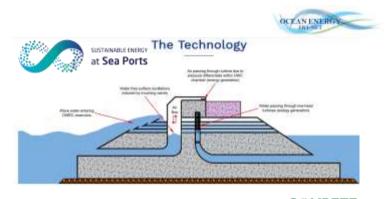


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Atlantic Area

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## Sustainability and innovation projects (partner / case study)



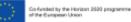
## PORTOS – Ports Towards Energy Self-Sufficiency

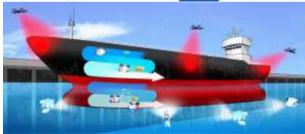
Implements wave tidal and wind anergy, at Atlantic Area ports, as to impact two environmental priorities: reduction of greenhouse gases emissions and air pollution by providing renewable energy-based solutions to harvest the mnewable energy potential of Atlantic Area coastal areas.

### BugWright2: Autonomous Robotic Inspection and Maintenance on Ship Hulls and Storage Tanks

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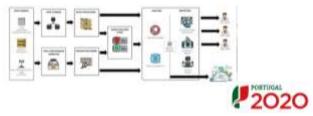


# Sustainability and innovation projects (partner / case study) Port Digital Twin – APDL case

- 3MapsTrack
- Allow real-time tracking of potentially dangerous goods in the Port of Leixões:
- Moving on trucks
- Parked in the container park
- GIIP Project -Intelligent Port Infrastructure Management
- Improve the availability of port infrastructure, reducing the total cost of maintenance, through automated and real-time monitoring of the status of degradation of port infrastructure and predictive analysis of its evolution

PMIS / SmartWaterWays Project - Automated vessel monitoring









## Network of Excellence

Our expectations regarding the Network of Excellence relate share the knowledge about the best practices in the port industry, innovative ideas, new technologies and the support for policy changes, being the best we can be.



## >>> DOCKSTHEFUTURE



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