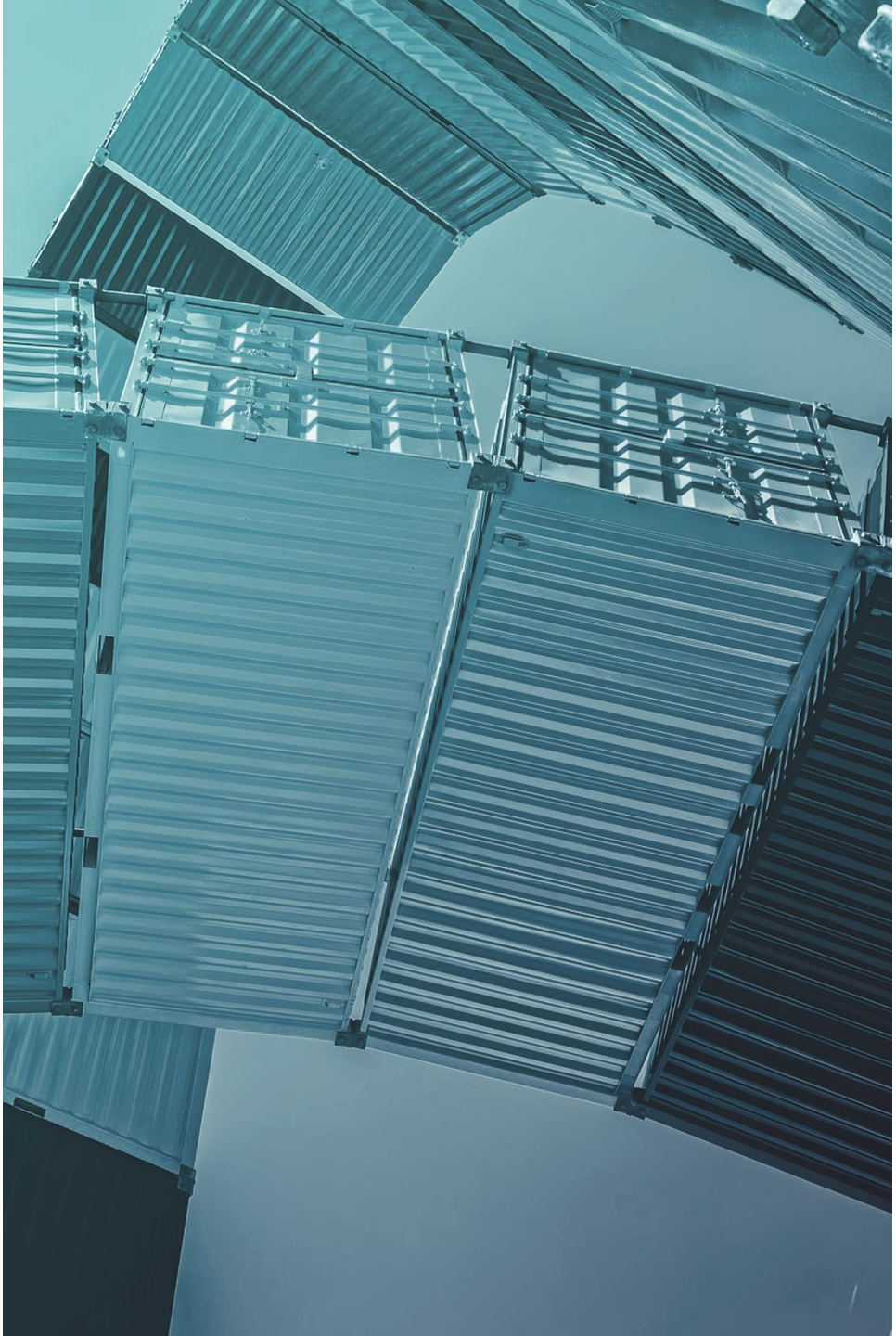

Fundación Valenciaport

Leader in Cluster & Port-Logistics Knowledge in the Mediterranean

FUNDACIÓN valenciaport

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2.- Relevant Projects

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FUNDACIÓN valenciaport

The Fundación Valenciaport

The Valenciaport Foundation for Research, Promotion and Commercial Studies of the Valencian region (Valenciaport Foundation) is a non-profit private entity. It has been conceived to further expand the reach of the logistics-ports community by serving as a research, training and cooperation centre of excellence.

The Valenciaport Foundation manifests an initiative of the Port Authority of Valencia (PAV), in collaboration with various other associations, companies and institutions.

Asociación Naviera Valenciana

valenciaport
Autoridad Portuaria de Valencia

Colegio Oficial de Agentes y Comisionistas de Aduanas de Valencia

ATEIA - OLTRA VALENCIA

GENERALITAT VALENCIANA

Lifting Global Trade.
APM TERMINALS

FERIA VALENCIA

CEV

BOLUDA

DIPUTACIÓ DE VALÈNCIA

Cámara Valencia

AJUNTAMENT DE VALENCIA

VNIVERSITAT DE VALÈNCIA

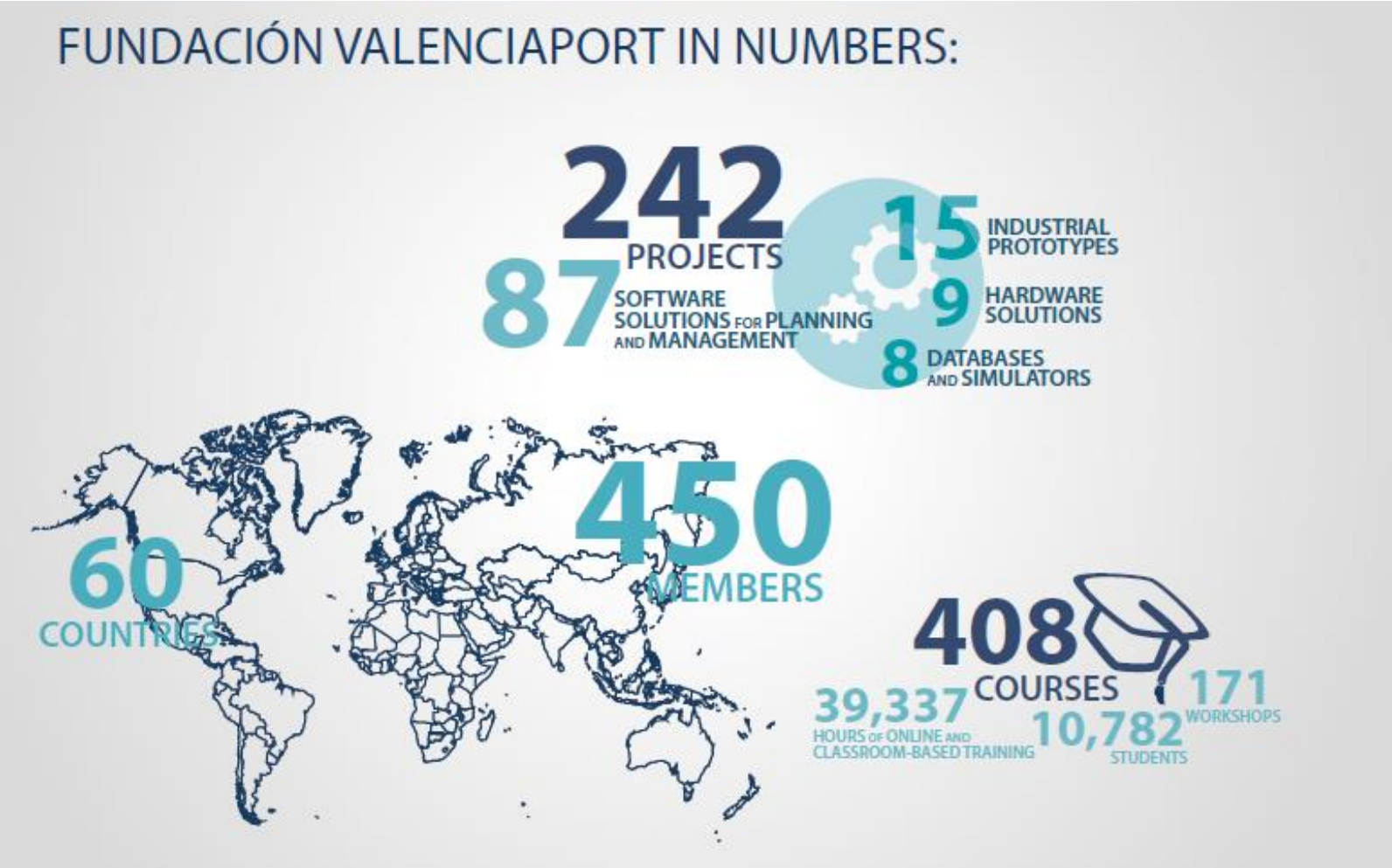
noatum

UNIVERSITAT POLITÈCNICA DE VALÈNCIA

Fundación Bancaja

FUNDACIÓN valenciaport

The Fundación Valenciaport



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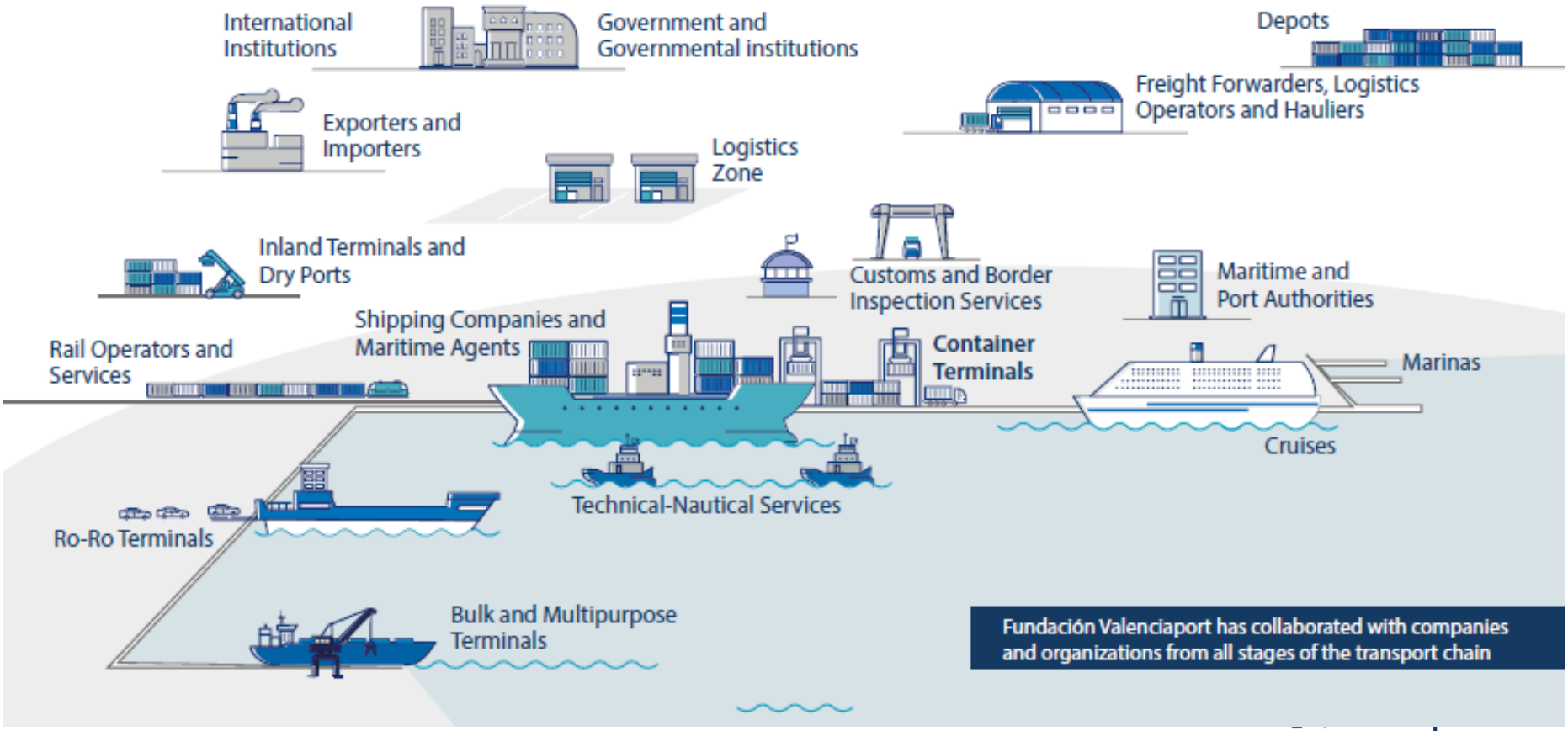
The Fundación Valenciaport

OUR CLIENTS



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Relevant Projects

Relevant Projects

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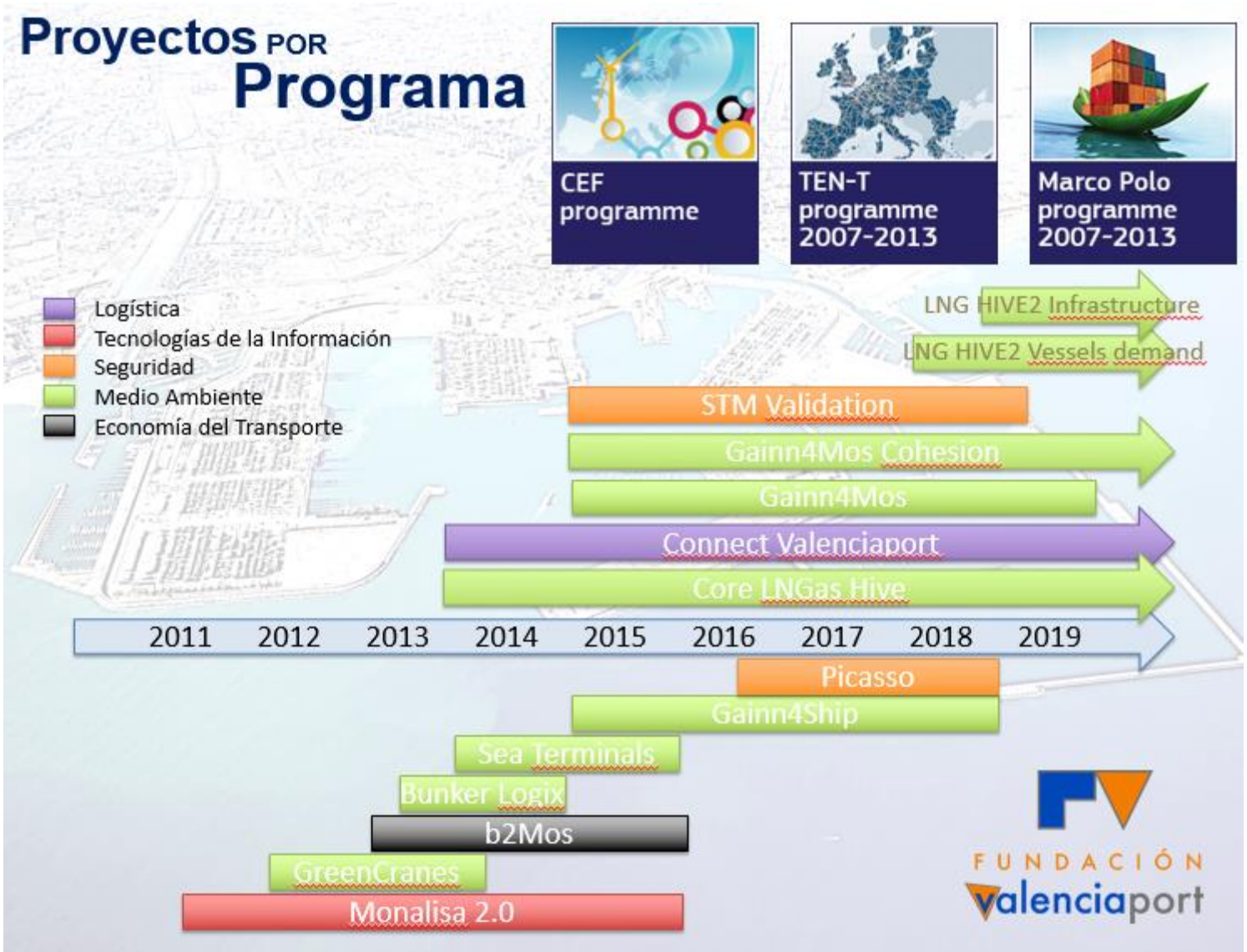
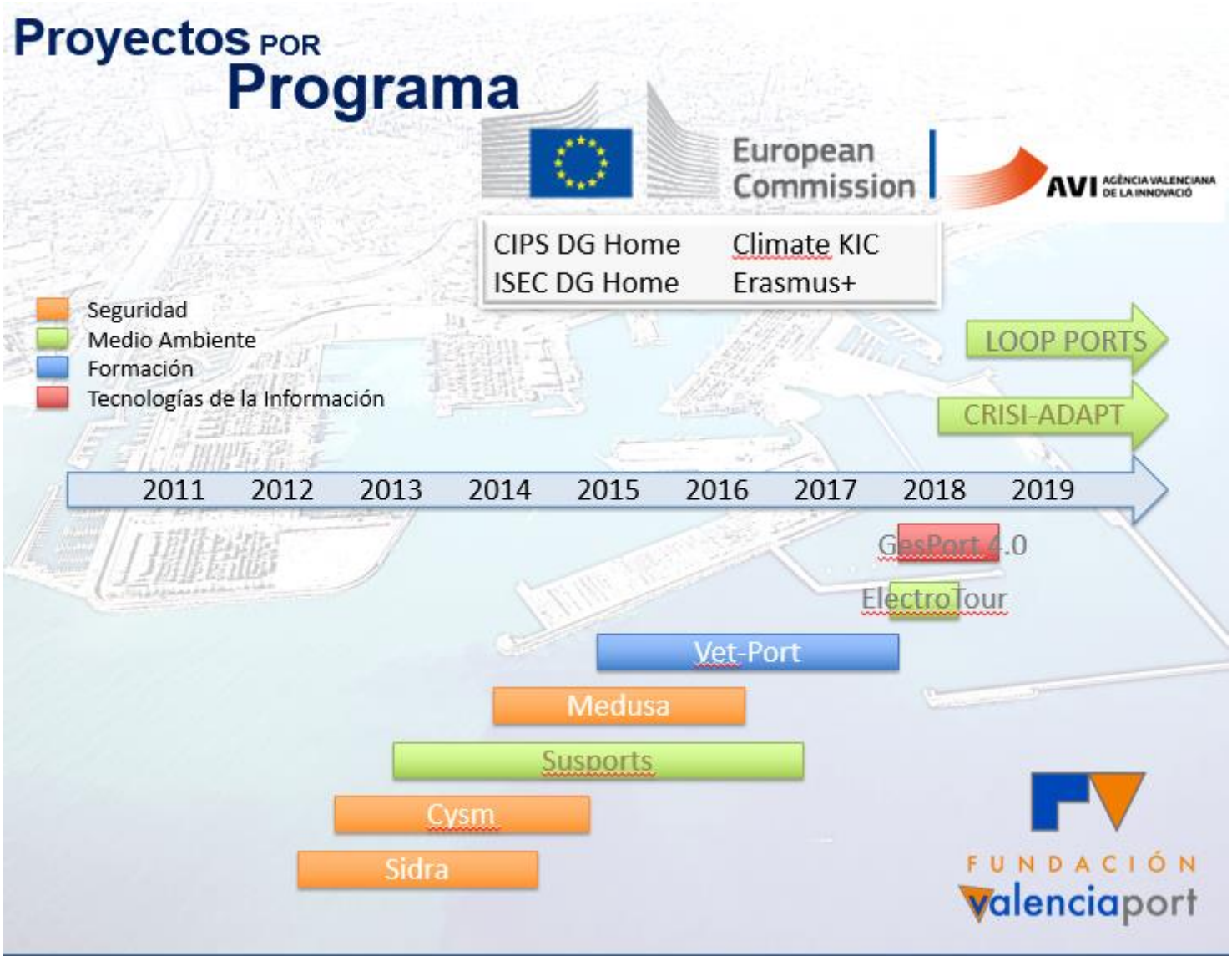
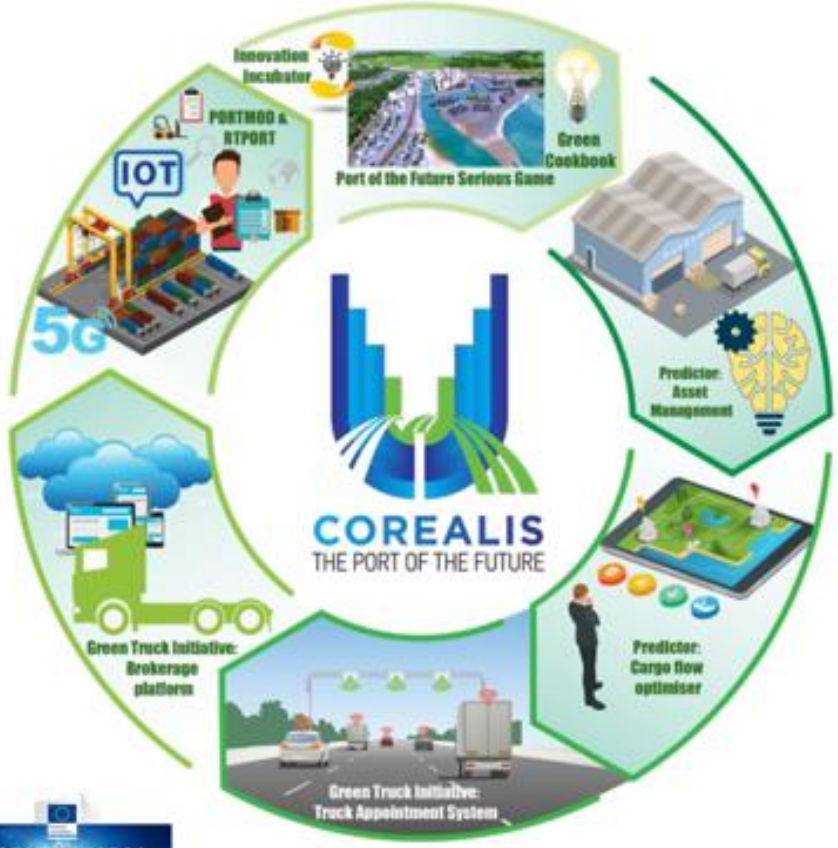


Relevant Projects



Relevant Projects

COREALIS proposes a strategic, innovative framework, supported by disruptive technologies, for cargo ports to **handle upcoming** and **future capacity, traffic, efficiency** and **environmental** challenges.



Solutions for optimal utilization of port assets

and

Solutions to organize and optimize inland freight traffics

through

- **Better information sharing**
- **Simulation**
- **New collaborative approaches and business models**
- **Improved predictive maintenance**
- **Improved predictive traffic forecasts**

Relevant Projects

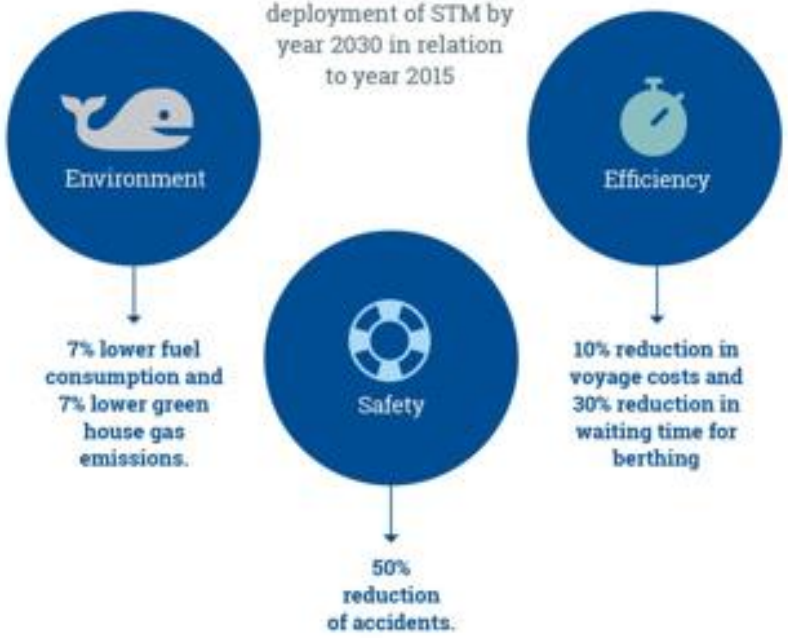
Sea Traffic Management

Sea Traffic Management (STM) connects and updates the maritime world in real time, with efficient information exchange, creating a safer, more efficient and environmentally friendly maritime sector.

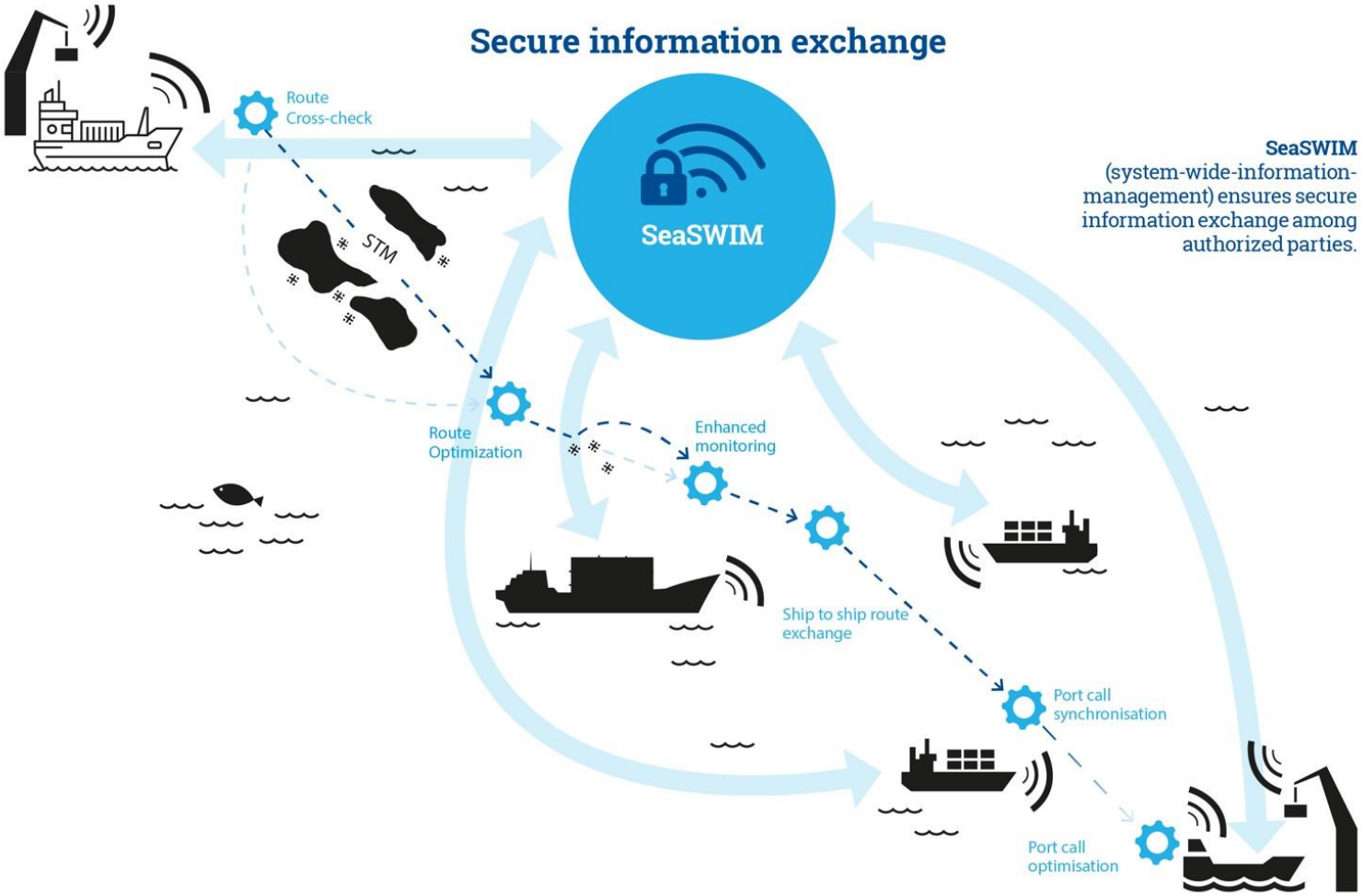
Stakeholders

Goals

Goals for full deployment of STM by year 2030 in relation to year 2015



Relevant Projects

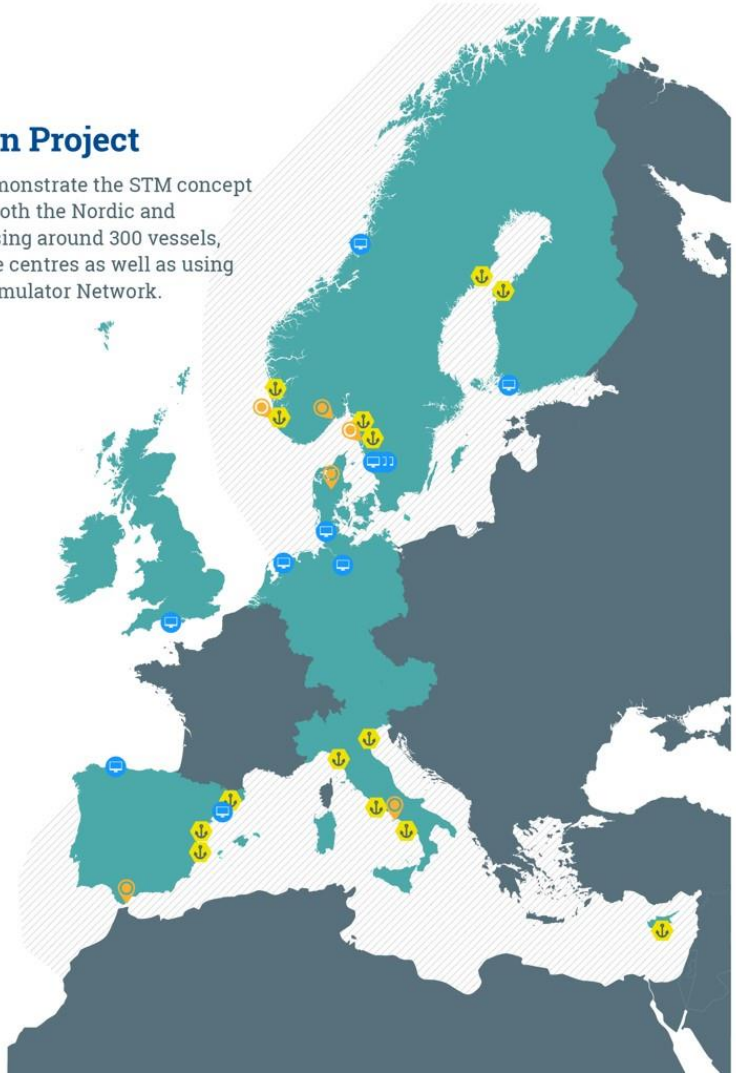


Relevant Projects

STM Validation Project

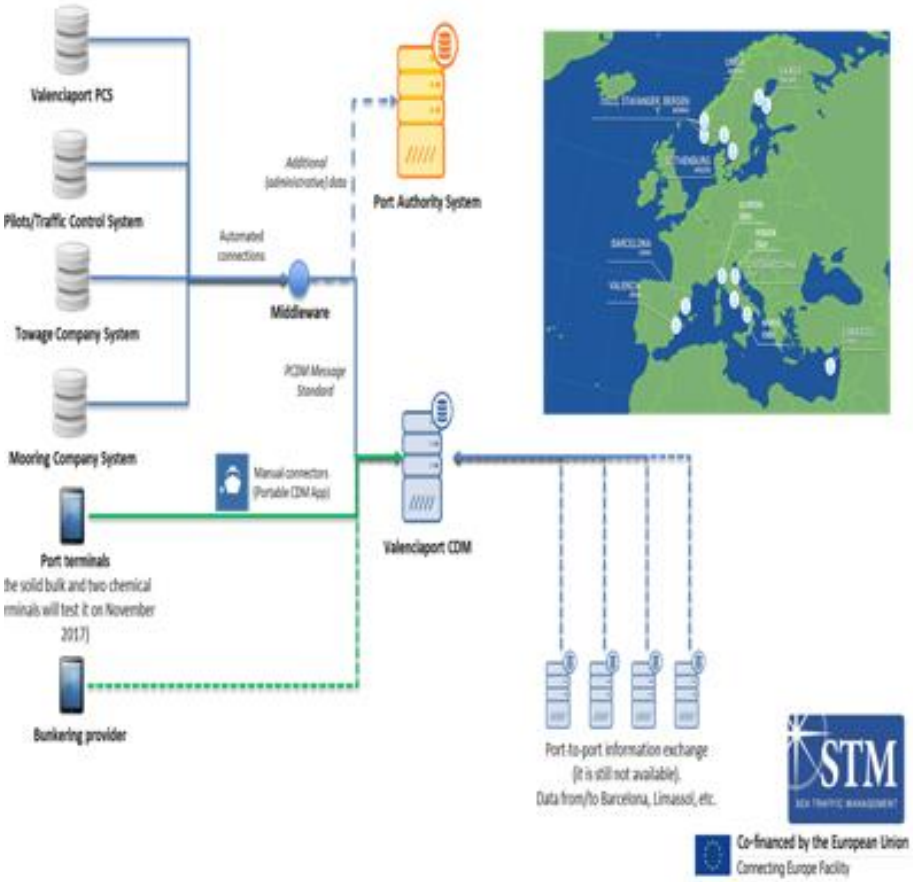
The STM Validation Project will demonstrate the STM concept in large-scale test beds in both the Nordic and Mediterranean Seas, encompassing around 300 vessels, 14 ports and 6 shore based service centres as well as using the European Maritime Simulator Network.

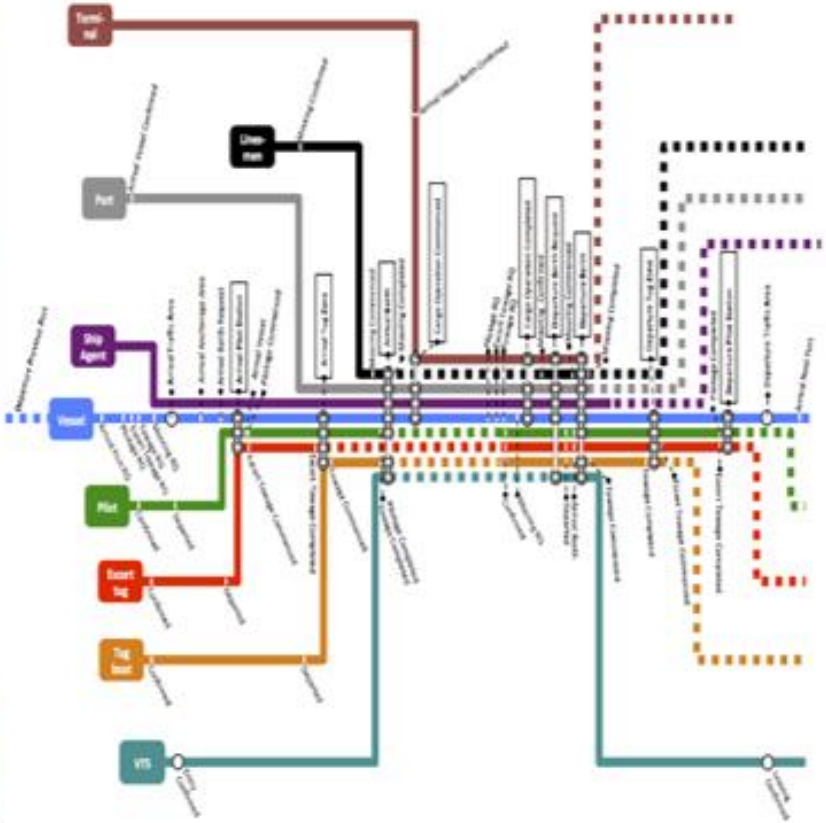
- Simulation centre in European simulation network (EMSN)
- Port CDM Port
- Shore centre
- Test bed for STM-services
- Country with project partner(s)



Relevant Projects

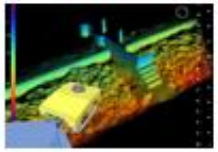
Port Collaborative Decision Making (PortCDM)





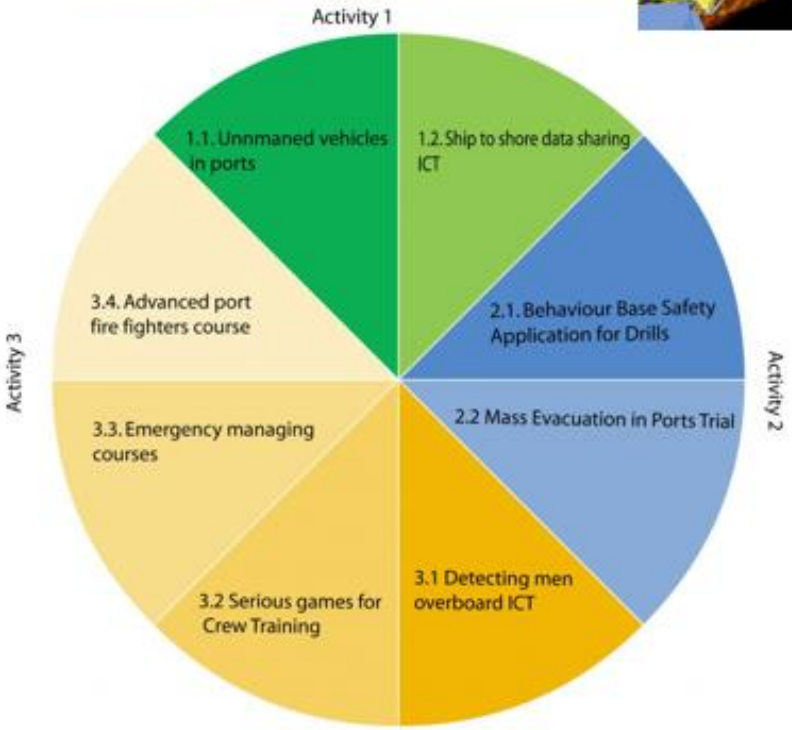
Relevant Projects

The overall goal of PICASSO is to achieve a modern and developed maritime sector, with a capable and up-to-date work force that enables the sector to become greener, safer and more efficient and sustainable.



On shore/on board safety and security

Training and human factor

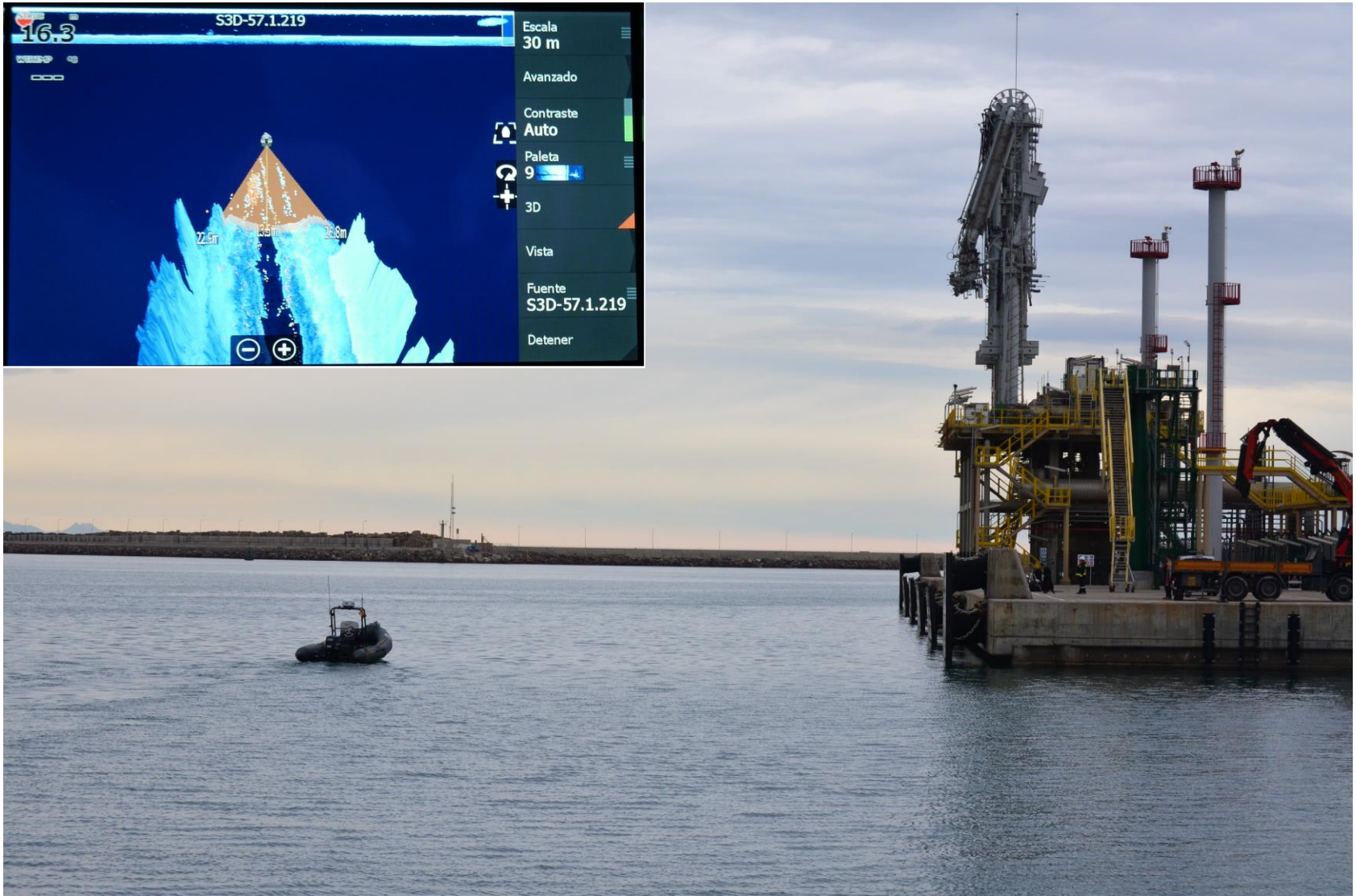


Emergency simulations

Picasso

Co-financed by the European Union
Connecting Europe Facility

Relevant Projects

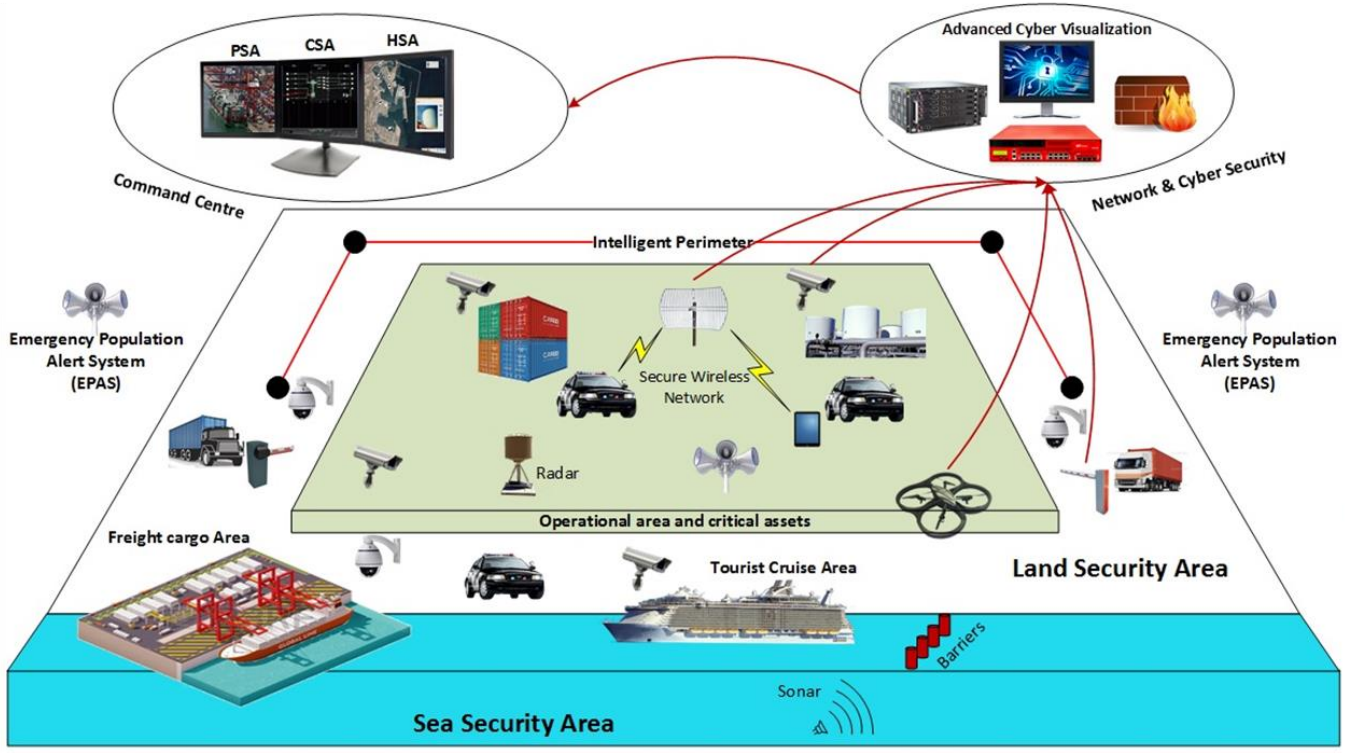


Relevant Projects

Scalable multidimensionAl sitUation awaReness sOlution for protectiNg european ports

Co-funded by the Horizon 2020 Framework Programme of the European Union

The vision of SAURON is to provide a multidimensional yet installation-specific Situational Awareness platform to help port operators anticipate and withstand potential cyber, physical or combined threats to their freight and cargo business and to the safety of their employees, visitors, passengers and citizens in the vicinity (European critical infrastructures)



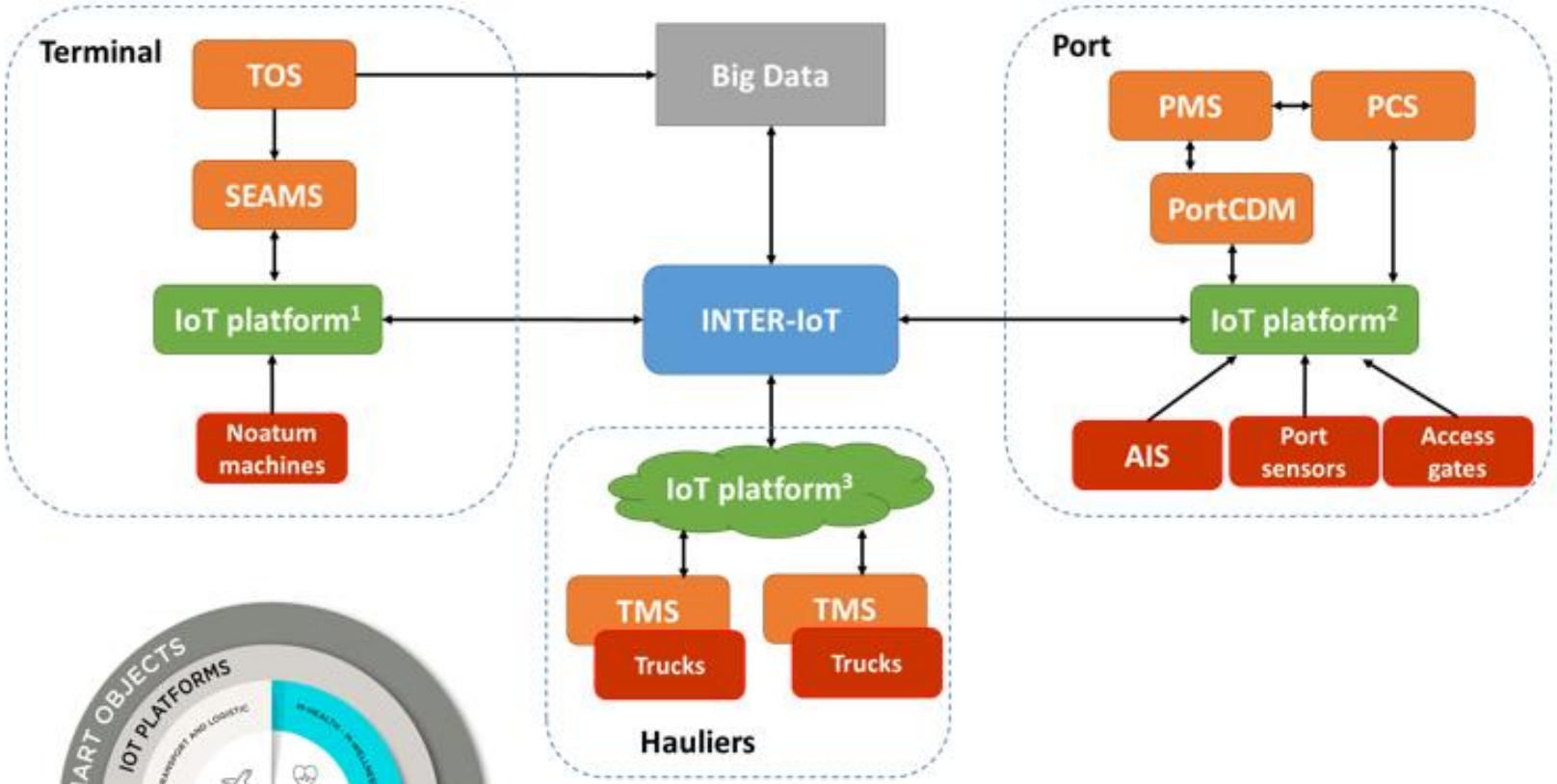
OPERATORS/END USERS	
FVP	ES
NOATUM	ES
PPA	GR
LP	IT
LK	SI

BIG INDUSTRY	
THALES	FR
MORPHO	FR
ETRA	ES

UNIVERSITY/RTO	
UPVLC	ES
UPRC	GR
AIT	AUS
KUL	BE

SME	
S2	ES
ISEC	UK

Relevant Projects



Relevant Projects

A NEW TRANSPORT PARADIGM

TransformingTransport is an EU-funded project that represents a strong consortium of 48 leading transport, logistics and information technology stakeholders in Europe. With a budget of EUR 16.7 million and the participation of 48 organisations from 9 countries, the Horizon 2020 Big Data Value Lighthouse project is working on finding a more efficient and more sustainable transport paradigm. It aims to show concrete, measurable and verifiable evidence of data value that can be achieved in mobility and logistics.

TT validates the technical and economic viability of Big Data to reshape transport processes and services to significantly increase operational efficiency, deliver improved customer experience, and foster new business models. It addresses 7 pilot domains of major importance for the mobility and logistics sector:

- Smart High-ways
- Sustainable Vehicle Fleets
- Multi-modal Urban Mobility
- **Ports as Intelligent Logistics Hubs**
- Efficient Air Transport
- Proactive Rail Infrastructures
- Dynamic Supply Chains

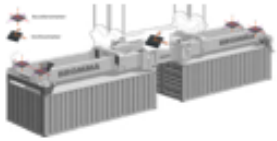
TRANSFORMING TRANSPORT

Horizon 2020
European Union funding
for Research & Innovation

Relevant Projects

Integrating Big Data and applying data analytics for prediction, early anomaly detection , and optimization of logistics operations

The **optimization of container handling operations** by creating the best schedule for import traffic at the gate



The massive monitoring of data related with the **spreader** operation to apply a **predictive maintenance strategy**

A user-friendly **cockpit** that provides port-related KPIs integrating external context and **predicts** their future trend

Initial

cassandra | WSO2 Data Analytics Server | KNIME | AMCHARTS

Integrate Big Data (PLC & TOS) → Data Streaming Processing → Analytics (ML engine) → Dashboard

SAP HANA | APAMA software | PMML Predictive Model Markup Language | MASHZONE NEXTGEN

Replication

TRANSFORMING TRANSPORT

Horizon 2020 European Union funding for Research & Innovation

Relevant Projects

SUMPORT

Interreg Mediterranean SUMPORT

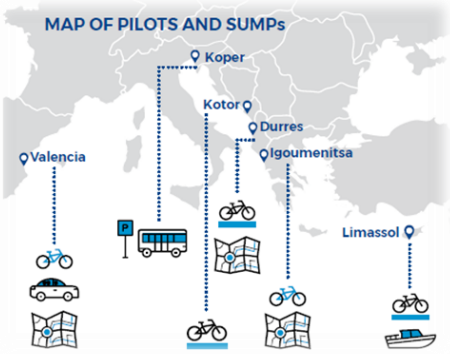
February 2017- July 2019

€2,358,759

Leader: Central Europe Initiative

Interreg Mediterranean — Project co-financed by the European Regional Development Fund

Priority axe 2:Specific objetive 2.3 : To increase capacity to use existing low carbon transport systems and multimodal connections among them



Its main objective is the improvement of sustainable mobility in MED port cities, by fostering the uptake of Sustainable Urban Mobility Plans in the MED area, with a specific focus on integrating city- and port-related traffic flows in the sustainable public transport planning.

Initiatives in Valencia

SUMP — Updated version of the Sustainable Urban Plan of the Authority Port of Valencia

Carpooling for port workers

E-bikes for cruise passengers

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FUNDACIÓN valenciaport

Relevant Projects

gainn 4MoS

January 2015 – September 2019

€ 41,314,934

Leader: Fundación Valenciaport

Co-financed by the European Union
Connecting Europe Facility

European Union, Connecting Europe Facility Transport Call for Proposals, 2014

GAINN4MOS aims to improve the Motorways of the Sea network in 6 Member States (Spain, France, Croatia, Italy, Portugal and Slovenia) by carrying out engineering studies on ship retrofitting and/or newbuildings, port LNG infrastructures, bunkering stations and a large set of pilot projects

SHIPS

SPABUNKER CUARENTA (Valencia)

Phases: Engineering studies
Type of Vessel: Bunkering Barge
Overall Length: 73.79 m
DWT: 4,200 Tn
Total Capacity of LNG Tanks: 800 m³

Challenge: Maintaining capacity to supply conventional fuels whilst ensuring safety of operations with different fuels.

TYPICAL RO-PAX FERRY (GNV – Italy)

Phases: Engineering studies
Type of vessel: Ro-pax
Overall Length: 211.5 m
DWT: 7,800 Tn
Total Cargo Capacity aprox.: 2,920 pax + 2,800 line meters
LNG storage tank: 750 m³

Challenge: To maintain the service operational conditions (speed and hotel conditions).

DOUBLE-END FERRY (Caronte and Tourist – Italy)

Phases: Engineering studies and prototype
Type of vessel: Ro-pax
Overall Length: 133.6 m
DWT: 2,000 Tn
Total Cargo Capacity aprox.: 1,500 pax + 600 line meters
LNG storage tank: 150 m³

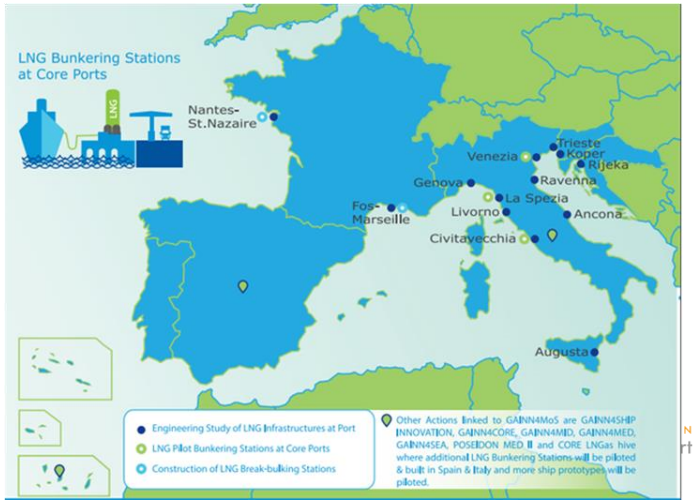
Challenge: First ever LNG ro-pax in the Mediterranean. Lack of LNG Bunkering services in Southern Italy and Sicily.

CARNIVAL XL PROJECT (Costa Crociere – Italy)

Phases: Maintenance strategy updated
Type of vessel: Cruise Ship
Overall Length: 337 m
GT: 180,000 Tn
Total Pax Capacity: 6,600 pax
LNG storage tank: 3,000 m³

Challenge: The LNG upgrade of NEPTUNE's software platform in order to meet safety and efficiency targets, that will be implemented on all Carnival Maritime's vessels.

PORTS



MIT(Italian Ministry of Infrastructure and Transport) Implementing Bodies in GAINN4MoS Action:

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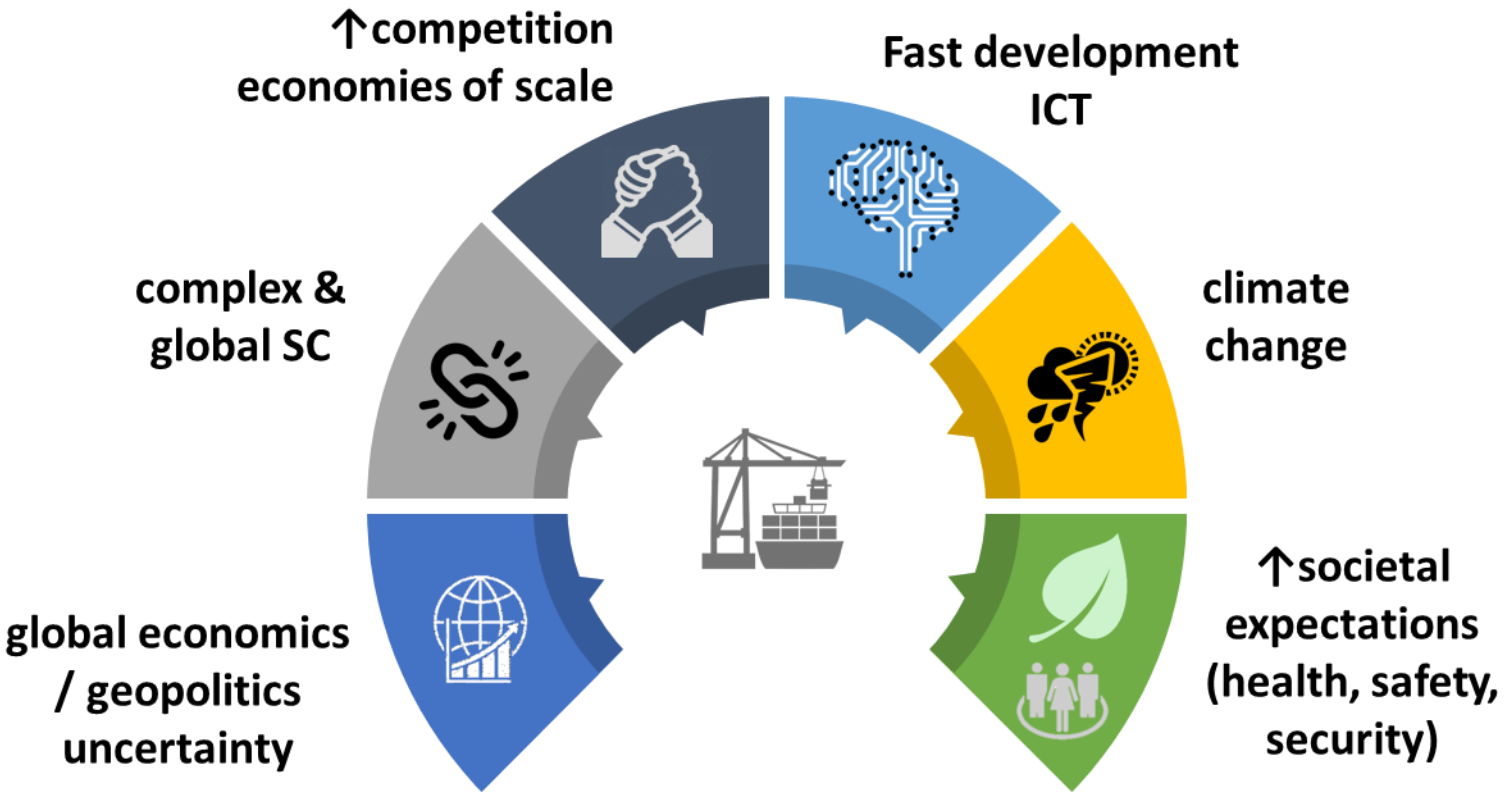
Challenges of the Port Industry



Challenges of the Port Industry

- DIGITAL TRANSFORMATION
- AUTOMATIZATION / ROBOTIZATION
- PI – SELF ORGANISING LOGISTICS – PORT CENTRIC LOGISTICS
- ZERO EMISSIONS – ZERO WASTE
- CLIMATE CHANGE
- PORT-CITY INTEGRATION
- BLUE ECONOMY

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Thank You!

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