



# PortForward

Towards a green and sustainable  
ecosystem for the EU  
**Port of the Future**

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**PIXEL Closure Event**, September 28

Olaf Poenicke, Fraunhofer IFF



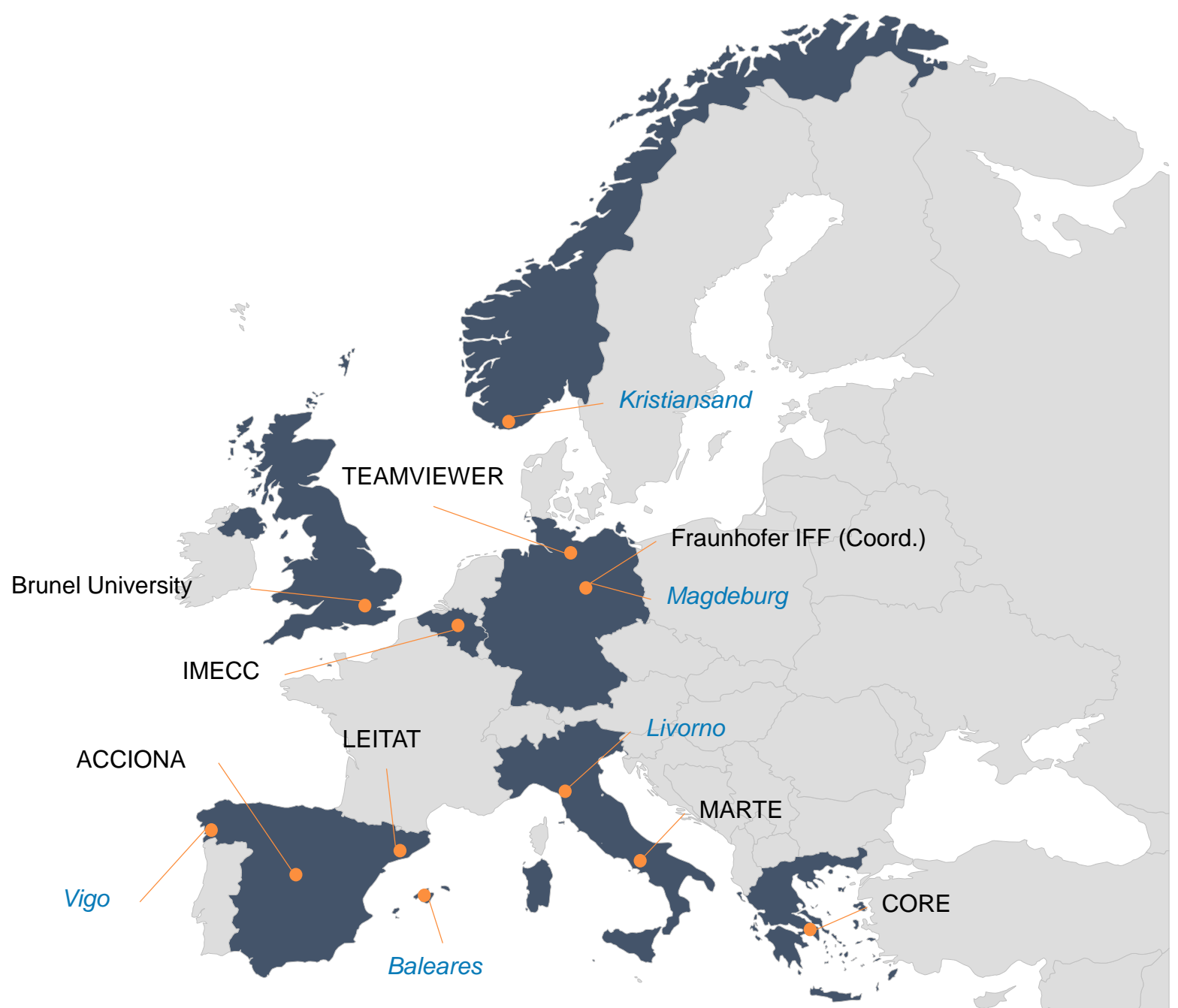
The project receives  
funding in the European  
Commission's Horizon  
2020 Research Program  
under Grant Agreement  
Number 769267



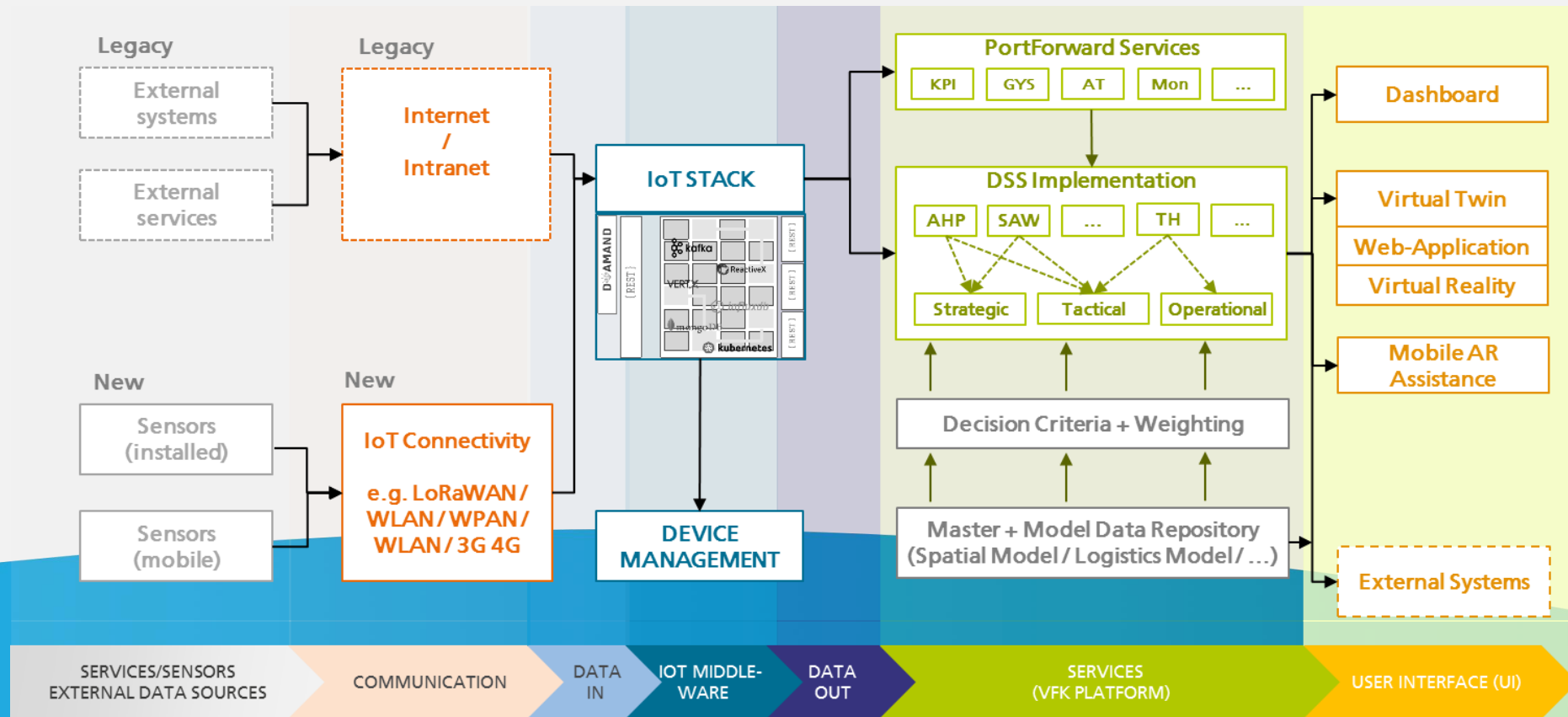
**Fraunhofer**  
IFF

13 project partners

48 months project  
duration (07/18-06/22)



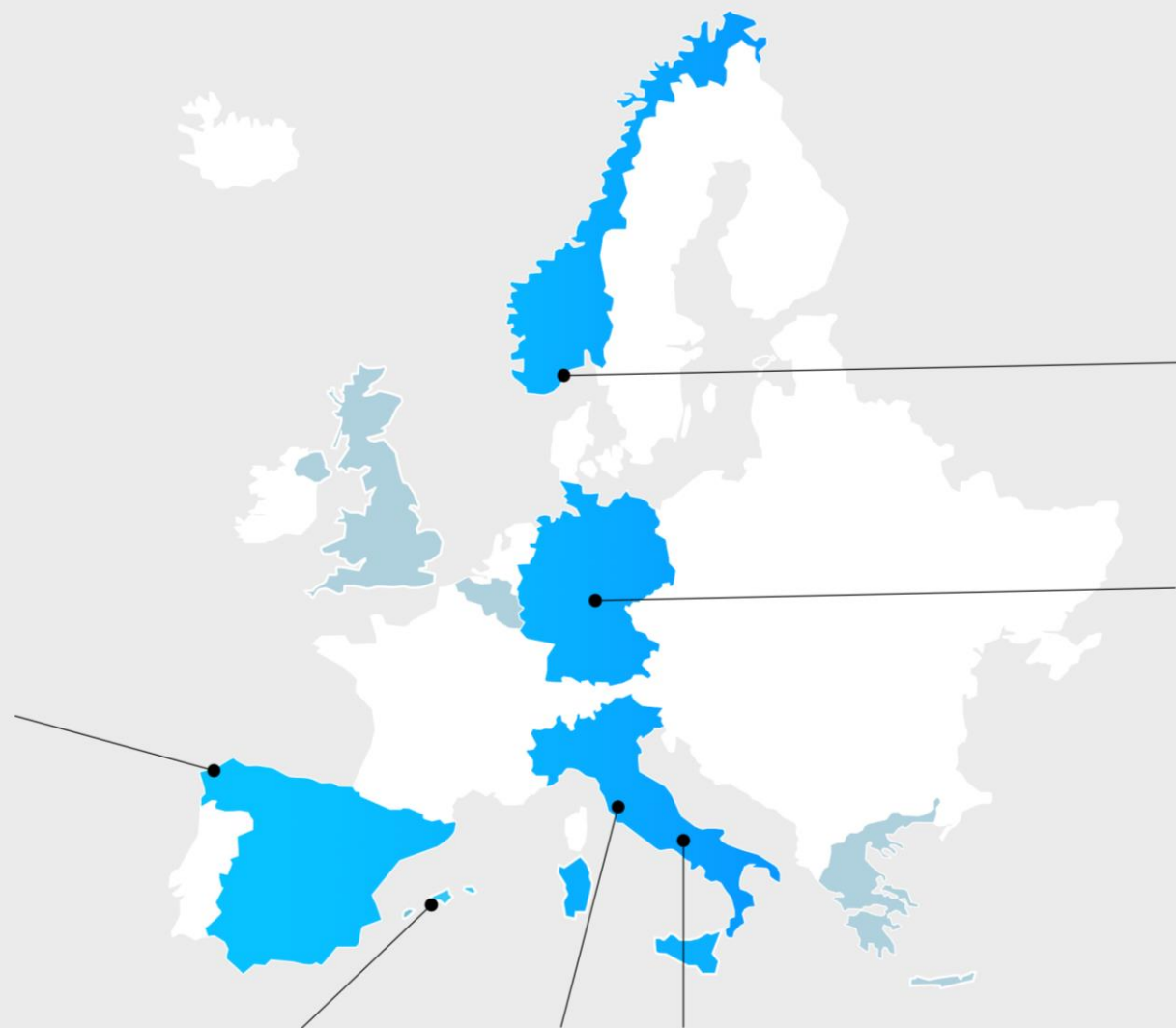
# The PortForward Platform



# PortForward Use Cases & Services

We test and validate the PortForward Platform and Services in ten Use Cases in **5 small and medium size EU ports.**

# 5 validating ports 1 replicating port



Port de  
Balears

Port of  
Vigo

Port of  
Naples

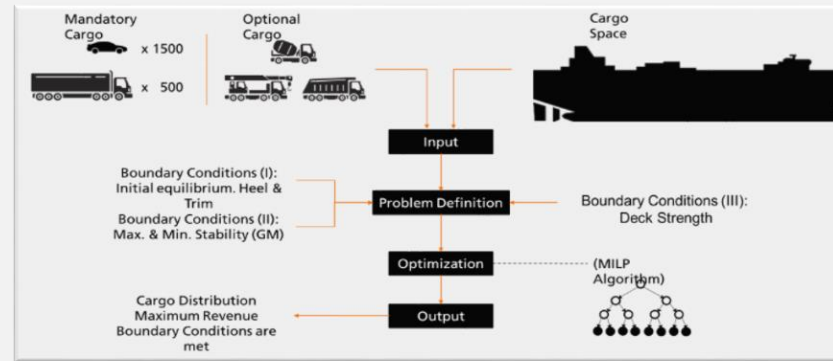
Port of  
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 For terminal operators

## RoRo & Stowage Optimization

Aimed to achieve the **most efficient use of the storage capacity** of RoRo vessels to improve the operational efficiency of logistics processes within the port terminal.



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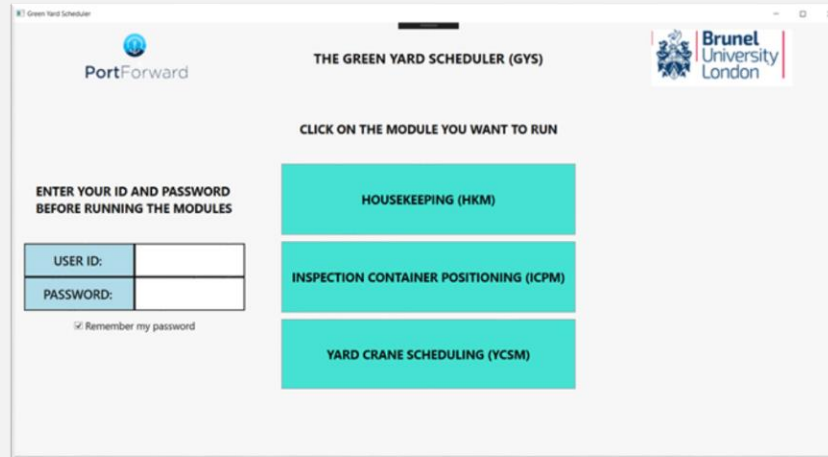
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 For terminal operators

## Green Yard Scheduler

A decision support system  
for more efficient and  
sustainable container  
terminal operations by  
**prioritising environmental  
sustainability alongside  
terminal productivity.**



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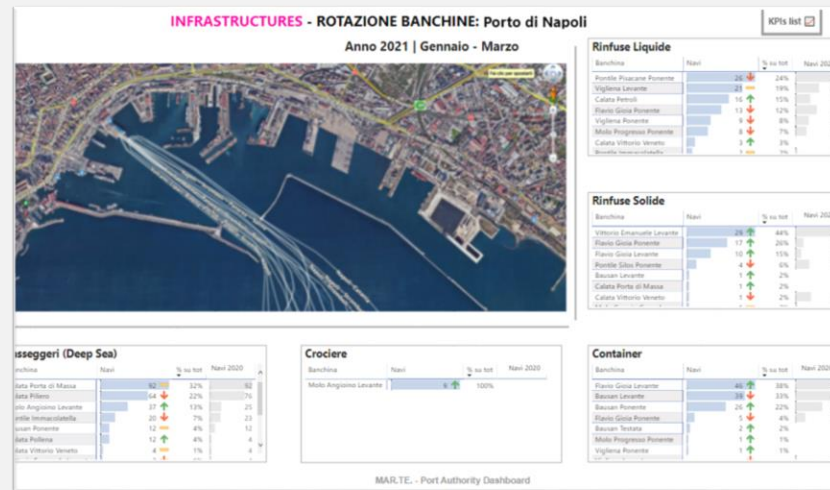
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 For port authorities

## Port Authority Dashboard (PAD)

A **data driven management system** for monitoring port activities and evaluating port performance based on an automatic retrieval and aggregation system of data gathered from several sources.



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 For port authorities

## Container Inspection

Supports the terminal worker digitally with the use of **smart glasses for goods control and inspection** within port boundaries, ensuring the security in controls and inspection operations.

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 For terminal operators

## Dynamic storage space monitoring

This real-time Decision Support System based on IoT and LiDAR data is developed as part of the Virtual Twin.

It enables the **optimization of storage area utilization and reduction of efforts for searching goods.**

# PortForward Exploitation Approaches

There are two approaches to exploit the results of the PortForward project:

- 1) **Exploitation of the PortForward Platform** → Develop an open platform with possibility to include other services (e.g. from PIXEL, COREALIS, other port related services)
- 2) **Exploitation of individual PortForward Services**



**We would like to further discuss approach 1) with sistering projects!**



# PortForward

Stay connected with us!



[www.portforward-project.eu](http://www.portforward-project.eu)



@portforward\_eu



PortForward project



PortForward EU project



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