

COREALIS is developing an innovative framework for assisting cargo ports in handling their upcoming and future capacity, traffic, efficiency and environmental challenges. It is benefitting from disruptive technologies, including Internet of Things (IoT), data analytics, next generation traffic management and emerging 5G networks.

COREALIS is implementing beyond state of the art, financially viable innovations for future ports. These will **optimise** the port land use, requiring minimum infrastructure upgrades, while at the same time respect circular economy principles and improve the urban life quality. The innovations will be implemented and tested in real operating conditions in 5 Living Labs (Piraeus, Valencia, Antwerp, Livorno and Haminakotka ports).



COREALIS is expected to achieve a significant reduction of both CO, port emissions & noise. It will also reduce operational port costs (congestion, waiting and idle times), and establish more efficient connections with the hinterland transport network, improving the modal split to rail and inland waterways.



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CONSORTIUM



























PROJECT INFORMATION

Project Name:

COREALIS (Capacity with a positive environmental and societal footprint: Ports in the Future era)

Project Duration:

36 months (starting on 1 May 2018) EC Funding: 5,150),40.00 €

Project Coordinator:

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Join COREALIS





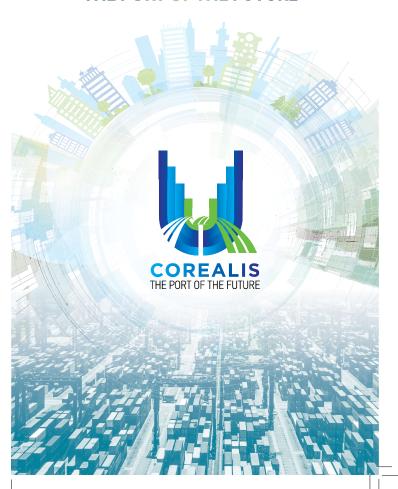








TOWARDS THE PORT OF THE FUTURE







PORT OF THE FUTURE SERIOUS GAME

(a simulation tool for decision making)

GREEN COOKBOOK - JUST-IN-

TIME (JIT)
RAIL SHUTTLE
SERVICE

(a feasibility study for key port-hinterland corridors)

MARKETPLACE & CHASSIS BROKERAGE PLATFORM

PIRAEUS

(A Cloud based marketplace for leasing and exchanging intra-port assets)



(an optimization planning/modelling tool for Container Terminal operations)



Innovation incubator

INNOVATION INCUBATOR

(a scheme making the port the epicenter of the local industrial landscape)



GREEN COOKBOOK – ENERGY ASSESSMENT FRAMEWORK

(a cost benefit analysis and roadmap for reducing port's environmental footprint)



CARGO FLOW OPTIMISER

(an optimization tool for ocean/rail/inlandwaterway cargo flows)

TRUCK
APPOINTMENT **T**SYSTEM (TAS)

LIVORNO

(a reservation system including real time traffic data)



PREDICTOR /ASSET MANAGEMENT

(an optimization, machine learning tool for efficient use of port assets)

ANTWERP	LIVORN	0	VALENG
11	AMERICALARIA	DIDATUC	

RTPORT

(A model-Driven Real-Time control module supporting 5G smart terminal operations)