

COREALIS Piraeus Demo/Training Webinar Project Overview

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COREALIS Facts & Figures



- ✓ Topic: "The Port of the future"
- ✓ Duration: 01.05.2018 30.04.2021 (36 months)
- ✓ Coordinator: Institute of Computers and Communication Systems
- √ 17 partners from 9 European and associated countries
- ✓ 4 Research Institutes, 5 Ports, 4 Industry partners, 3 SMEs, 1 ITS Association
- ✓ Living Labs in **Five European Port-Cities** including 3 out of the top-5 in Europe





COREALIS Piraeus Living Lab



Antwerp Port, Belgium



Piraeus Port, Greece



Valencia Port, Spain



Livorno Port, Italy



Haminakotka Port, Finland









COREALIS proposes a **strategic**, **innovative framework**, supported by **disruptive technologies**, including Internet of Things (IoT), data analytics, next generation traffic management and emerging 5G networks, so that cargo ports can face <u>current and future challenges</u> regarding:

- Optimization of port operations
- Reduction of environmental footprint
- Increase of efficiency & reduction of traffic within and around ports
- Sustainability of the socioeconomic development of the port and its surrounding area





COREALIS Innovations



Port of the Future Serious Game

(simulation tool for decision making)

RTPORT

(5G-enabled smart terminal operations, IoT)

Brokerage Platform

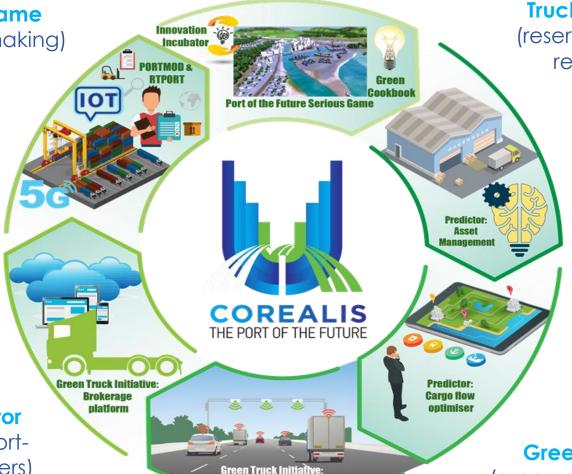
(cloud based marketplace for leasing intra-CT trucks)

PORTMOD

(optimization planning tool for CT operations)

Innovation Incubator

(development of portcity innovation clusters)



Truck Appointment System

(reservation system including real-time traffic data)

Just-In-Time Rail Shuttle Service

(feasibility study for key porthinterland corridors)

Cargo Flow Optimiser

(optimization of cargo flows ocean/rail/inlandwaterway)

Predictor for Asset Management

(machine learning based Just in Time inventory)

Green Cookbook

(green energy solutions)



Truck Appointment Syste



Matrix of COREALIS Demos & Innovations



Hinterland connectivity

Intra-Terminal operations

Decision making/Innovation

	TAS	Brokerage platform	JIT Rail Shuttle Service	Cargo Flow Optimiser	Predictor / Asset Mgmt	PORTMOD	RTPORT	Energy assessment & Green cookbook	PoF Serious Game	Innovation Incubator
Valencia	X		X							X
Piraeus					X			X	X	
Livorno						X	X		X	
Antwerp		X		X						
Haminakotka	X					X			X	







https://www.youtube.com/watch?v=ljt8n0ec0o8











































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COREALIS EU Project



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THANK YOU FOR YOUR ATTENTION





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