

COREALIS Final Event



COREALIS At a Glance

Dr Angelos Amditis

Project Coordinator Research Director, ICCS/i-Sense Group

April 23rd, 2021





COREALIS - Capacity with a positive enviRonmEntal and societAL footprInt: portS in the future era

H2020-EU.3.4 Project for SOCIETAL CHALLENGES - Smart, Green And Integrated Transport, funded under topic MG-7.3-2017 - Mobility for Growth

COREALIS Grant Agreement signed by the EC on 26 March 2018

Project start date: 1 May 2018

Coordinator: Institute of Communications and Computer Systems

Partners: 17 from 9 countries

Duration: 36 months

EU Funding: **5,150,540.00€**

Project end date: 30 April 2021

Living labs: 5 European Port-Cities including 3 out of the top-5 in Europe







COREALIS vision-main goals



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 Living Labs



Antwerp Port, Belgium



Piraeus Port, Greece



Valencia Port, Spain



Livorno Port, Italy



Haminakotka Port, Finland







COREALIS Innovations



Port of the Future Serious Game

(simulation tool for decision making)

RTPORT

(5G-enabled smart terminal operations, IoT)

Brokerage Platform

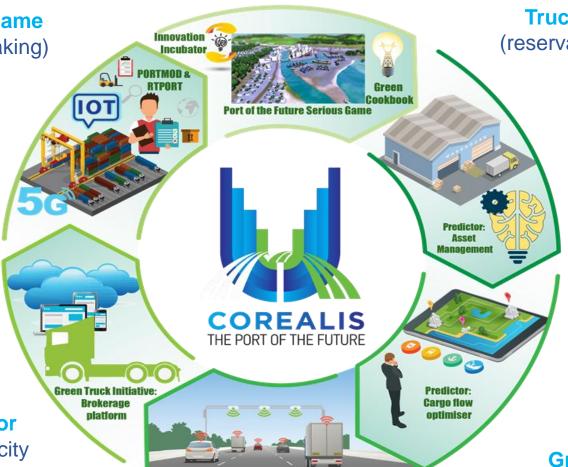
(cloud based marketplace for leasing intra-CT trucks)

PORTMOD

(optimization planning tool for CT operations)

Innovation Incubator

(development of port-city innovation clusters)



Truck Appointment System

(reservation system including realtime traffic data)

Just-In-Time Rail Shuttle Service

(feasibility study for key porthinterland corridors)

Cargo Flow Optimiser

(optimization of cargo flows ocean/rail/inland-waterway)

Predictor for Asset Management

(machine learning predictive maintenance)

Green Cookbook

(green energy mix for CTs)



Green Truck Initiative

Truck Appointment Syster



Matrix of COREALIS Demos & Innovations



Hinterland connectivity

Intra-Terminal operations

Decision making/Innovation

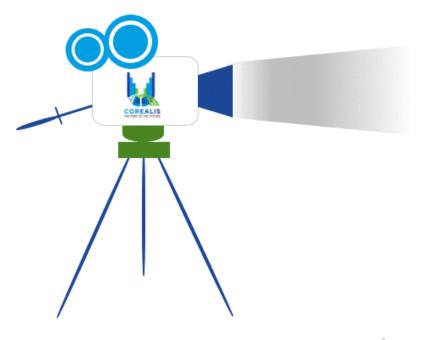
	TAS	Brokerage platform	JIT Rail Shuttle Service	Cargo Flow Optimiser	Predictor / Asset Mgmt	PORTMOD	RTPORT	Energy assessment & Green cookbook	PoF Serious Game	Innovation Incubator
Valencia	X		X							X
Piraeus					X			X	X	
Livorno						X	X		X	
Antwerp		X		X						
Haminakotka	X					X			X	





COREALIS video & partners





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











































www.corealis.eu



corealis_eu



COREALIS EU Project



Corealis_eu



info@corealis.eu

THANK YOU FOR YOUR ATTENTION





Dr Angelos Amditis

□ a.amditis@iccs.gr

