COREALIS HaminaKotka Demo/Training Webinar

Project Overview

Elena Krikigianni - SEABility

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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 Living Labs

Antwerp Port, Belgium

Piraeus Port, Greece

Valencia Port, Spain

Livorno Port, Italy

Haminakotka Port, Finland

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 Innovations

Port of the Future Serious Game
(simulation tool for decision making)

RTPORT
(a Model-Driven Real-Time control module supporting 5G smart terminal operations)
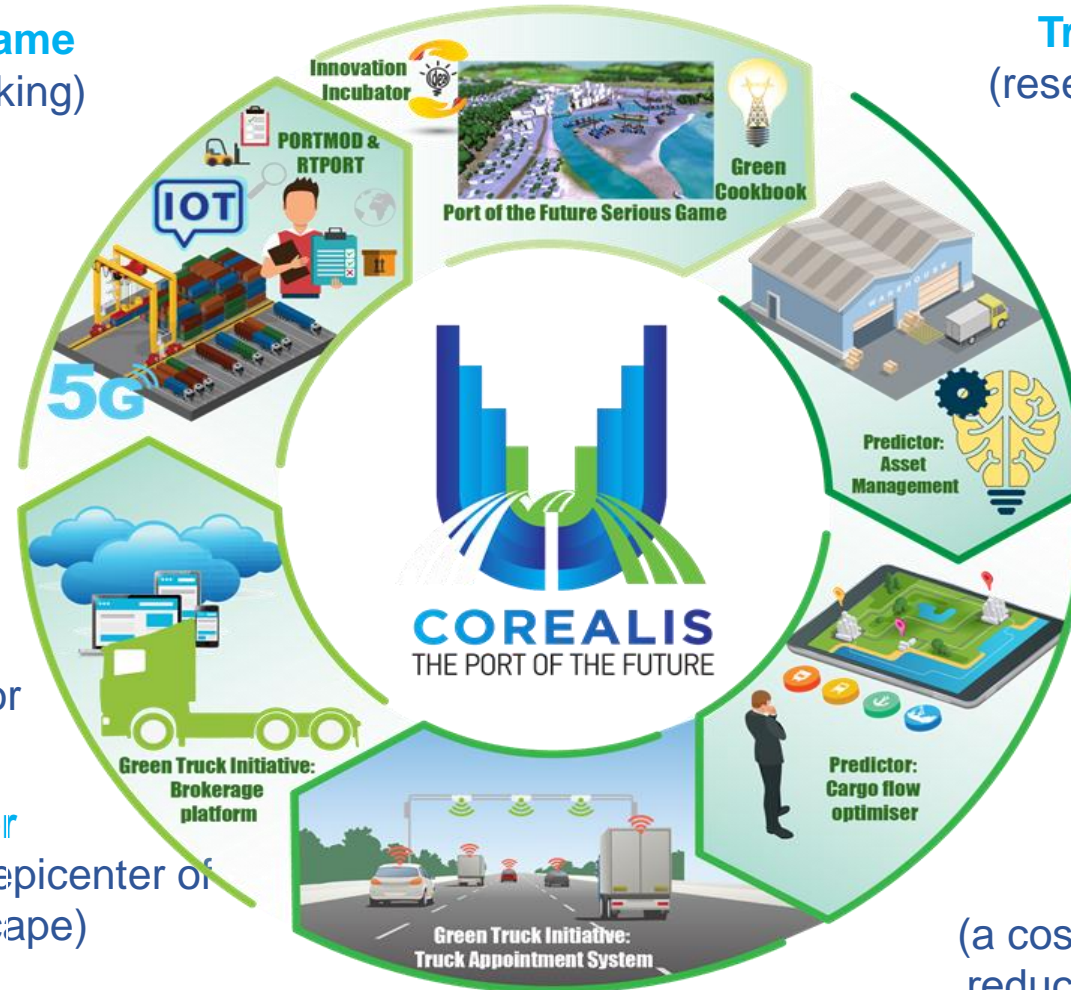
Brokerage Platform
(Cloud based marketplace for leasing and exchanging intra-port assets)

PORTMOD
(an optimization modelling tool for CT operations)

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

Truck Appointment System
(reservation system including real-time traffic data)

Just-In-Time Rail Shuttle Service
(feasibility study for key port-hinterland corridors)

Cargo Flow Optimiser
(an optimization tool for ocean/rail/inland waterway cargo flows)

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

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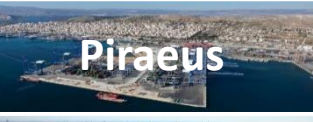(a cost benefit analysis and roadmap for reducing port's environmental footprint)

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 at a glance

https://www.youtube.com/watch?v=Ijt8n0ec0o8

THANK YOU FOR YOUR ATTENTION

Elena Krikigianni

✉ e.krikigianni@seability.eu