



COREALIS Webinar

A palette of port-driven technological and societal innovations

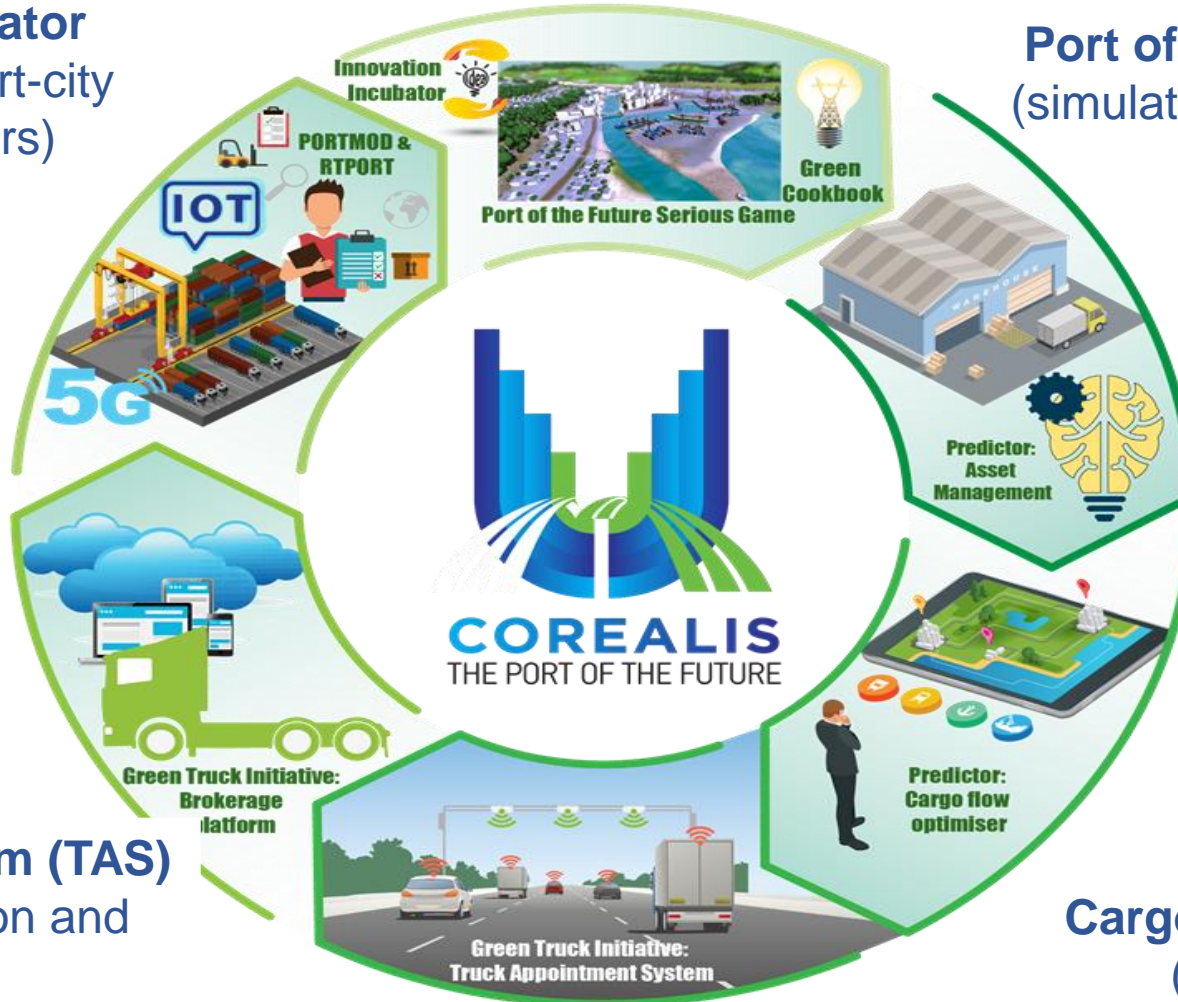




Port-driven technological and societal innovations



Innovation Incubator
(development of port-city innovation clusters)



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

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

Predictor/ Asset Management
(optimisation, machine learning)

Green Cookbook
(green energy solutions)

Cargo Flow Optimiser
(optimisation)

RTPORT

(5G-enabled smart terminal operations, IoT)

PORTMOD

(optimization tool for CT operations)

Brokerage Platform

(cloud based marketplace)

Truck Appointment System (TAS)

(real time traffic information and positioning data)





4 Pillars – Objective 1

O1. Embrace circular economy models in its port strategy and operations.

How?

- Cloud Brokerage platform
 - ✓ Cloud based marketplace
- Predictor/Asset Management
 - ✓ Optimisation, machine learning
- Green cookbook
 - ✓ Green energy solutions



4 Pillars – Objective 2 (O2)

O2. Reduce the port's total environmental footprint associated with intermodal connections and the surrounding urban environment for three major transport modes, road/truck, rail and inland waterways.

How?

- Advanced TAS
 - ✓ Real time traffic information
- Cargo Flow Optimiser
 - ✓ Optimisation
- Rail-shuttle service feasibility study
 - ✓ Feasibility study



4 Pillars – Objective 3 (O3)

O3. Improve operational efficiency, optimise yard capacity and streamline cargo flows without additional infrastructural investments.

How?

- RT-PORT
 - ✓ 5G-enabled smart terminal operations
- PORTMOD
 - ✓ Optimisation tool
- Predictor/Asset Management
 - ✓ Optimisation, machine learning



4 Pillars – Objective 4 (O4)

O4. Enable the port to take informed medium-term and long-term strategic decisions and become an innovation hub of the local urban space.

How?

- Port of the Future Serious Game
- ✓ Simulation tool for decision making
- Innovation Incubator
- ✓ Hackathon



Stakeholder-driven approach

- **Phase I:** Scenarios & Requirements Identification
- **Phase II:** Technical Design and Development
- **Phase III:** Living Lab Full-scale Implementation and Impact Assessment



Matrix of COREALIS Demonstrations vs Innovations



	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
Pireaus					X			X	X	
Livorno						X	X		X	
Antwerp		X		X						
HaminaKotka	X					X			X	





-  www.corealis.eu
-  [corealis_eu](https://twitter.com/corealis_eu)
-  [COREALIS EU Project](https://www.youtube.com/COREALIS_EU_Project)
-  [Corealis_eu](https://www.linkedin.com/company/corealis_eu)
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THANK YOU FOR YOUR ATTENTION

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