



COREALIS Webinar

Port of Antwerp Living Lab

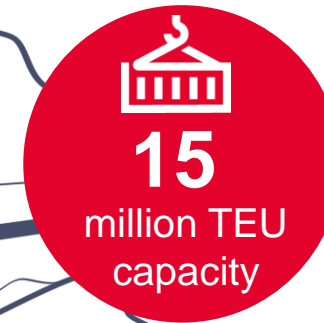
Nico De Cauwer

COREALIS Webinar 7.03.2019



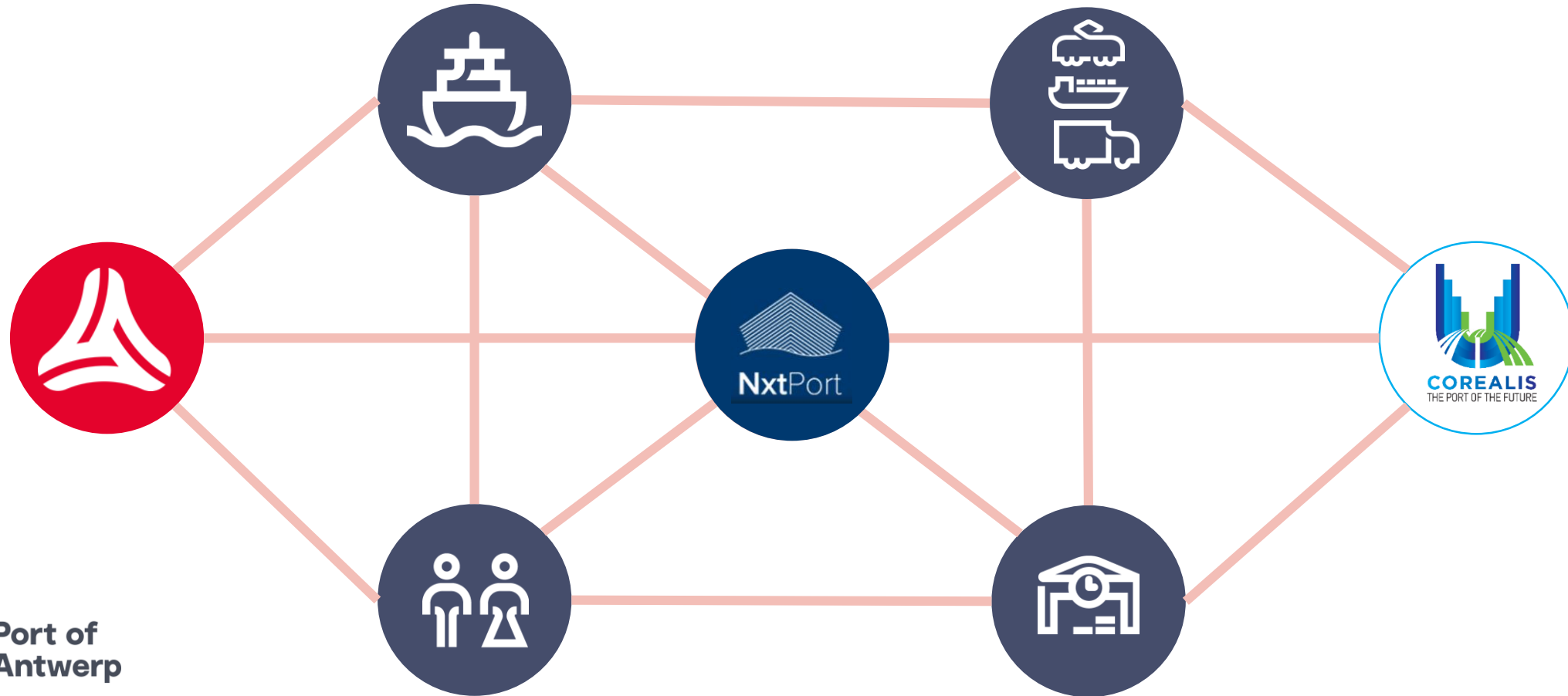
Port of Antwerp-At a glance

Second largest port in Europe
Belgium's biggest economic driver





Bringing the community together





Scenarios for the Living Lab of PoA

Cargo Flow Optimiser

- ✓ **Scenario 1**
Optimizing port's terminal logistic operations to achieve a smart organization of containers placed on a port's terminal
- ✓ **Scenario 2.a**
Enhanced route planner with price information and flow prediction to recommend best routes depending on transport time and expected availability
- ✓ **Scenario 2.b**
Propose "shared" on-demand transport services to promote multimodal sustainable modes proposing new shared transport services

Brokerage platform

- ✓ **Scenario 3**
Cloud based Marketplace and chassis/yard Equipment brokerage platform



Main goal and expected benefits

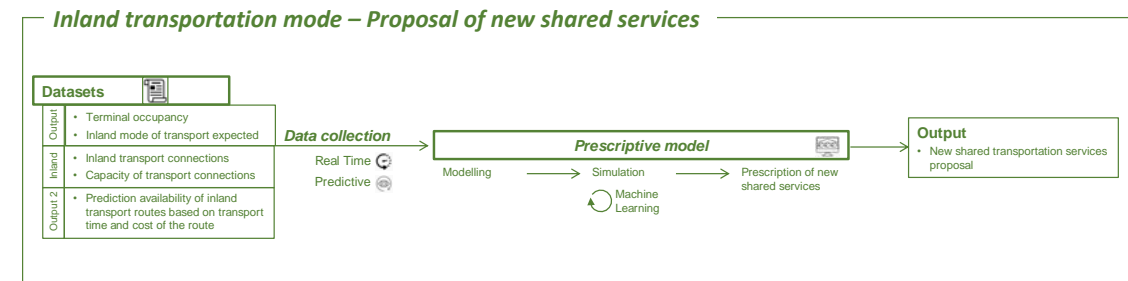
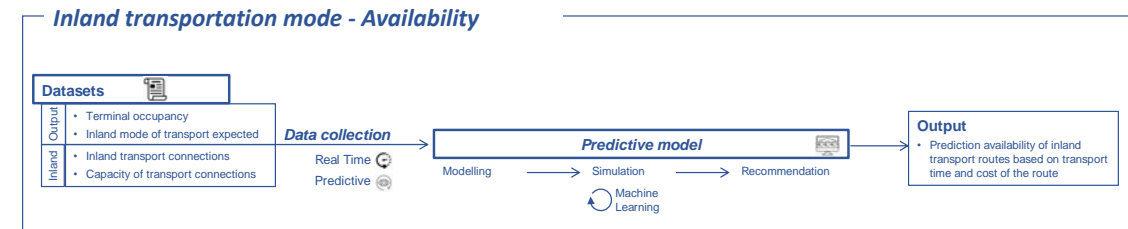
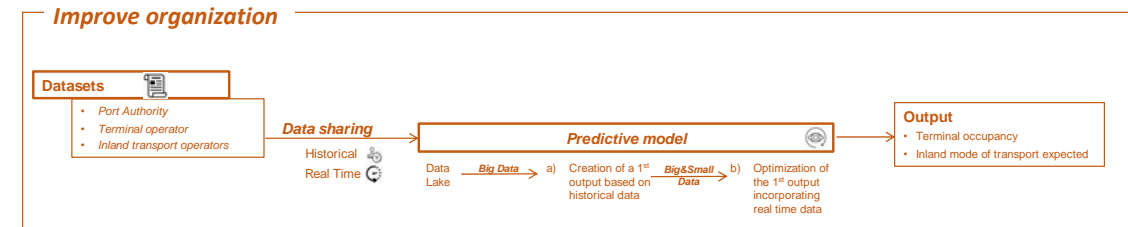
Cargo Flow Optimiser:

- **Main goal:**

- Aim is to minimize containers' waiting time at the port
- Cargo flow prognoses for short, mid and long-term will be implemented to optimise the port infrastructure and promote modal share in inland connections

- **Expected benefits:**

- Improve modal split towards rail and barge
- Reduce the dwell time of containers in the port



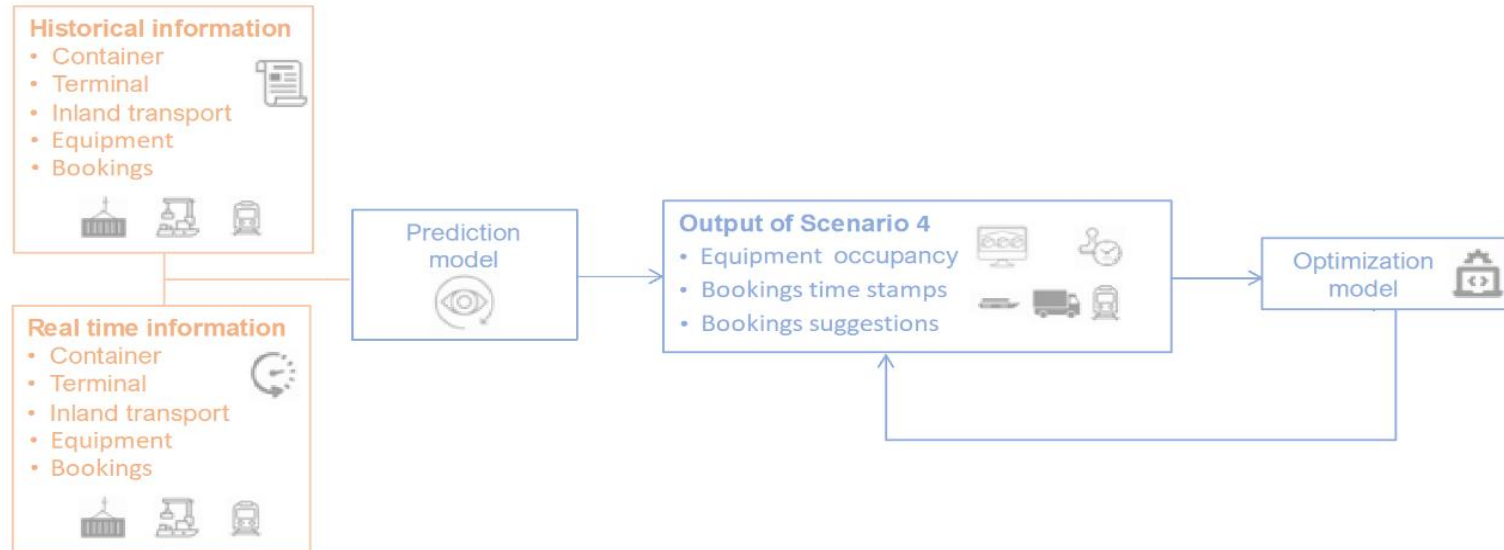


Main goal and expected benefits

Brokerage platform:

- **Main goal:**

- Efficient flow of containers and more free space at terminals
- Low demurrage due to equipment unavailability



- **Expected benefits:**

- Proper use of port equipment – low idle time
- Booking of equipment between terminals – no unnecessary investments



Contribution PoA Living Lab to COREALIS goals



COREALIS objectives

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



**Cloud Brokerage
platform
(Marketplace)**

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.



Cargo Flow Optimiser

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

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





Conclusions

Next steps:

1

Living lab environment NxtPort

- Creating the Antwerp Living Lab technical environment on the NxtPort data utility platform
- Designing API's for the data connection

2

Cargo Flow Optimiser

- Development of the Alpha version of the CFO
- Setting up in a live Living Lab environment for testing with all stakeholders

3

Cloud based Brokerage platform (Marketplace)

- Development of the Alpha version of the Brokerage platform
- Setting up in a live Living Lab environment for testing with all stakeholders



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THANK YOU FOR YOUR ATTENTION



**Port of
Antwerp**



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