# Capacity with a pOsitive enviRonmEntal and societAL footprInt: portS in the future era



# D5.3: Antwerp Living Lab – Scoping Document

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# Executive Summary

This document is aiming to describe the technical specifications and scenarios of the Cargo Flow Optimiser (CFO) and the Cloud based marketplace and equipment brokerage platform (EBP) to be tested and implemented in the Antwerp Living Lab (Port of Antwerp).

A Requirement Traceability Matrix of the user requirements collected in the deliverable D1.3 with an association to the Antwerp Living Lab and specific COREALIS system is provided in chapter 2.

Chapter 3 describes briefly the different scenarios for both the CFO and the EBP. The CFO aims at optimising the CT logistic operations, will contain an enhanced route planner and will propose shared on-demand transport services. The EBP aims at sharing information between stakeholders on available equipment and make it available for booking. Reference is made to the persons/actors for each scenario.

The system requirements that are extracted from the user requirements of chapter 2 are being introduced in chapter 4. They are supplemented with some non-functional requirements.

In chapter 5 the focus lies on the elements in respect to the data, the dataflow and the interaction between the different innovations that will be part of the CFO and the EBP.

Chapter 6 describes in detail the data needed for the successful implementation of the different scenarios.

In chapter 7 the possible interactions with the Port of Antwerp's native or other systems are mentioned.

Chapter 8 gives the final conclusions and describes the expected benefits such as the optimisation and reduction of dwell time of containers on the CT's, the improvement of the modal split towards rail and barge and the optimisation of the use and storage of yard equipment and services for the terminal operators.