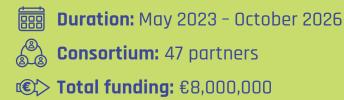# Transforming urban logistics to a different beat

Greenhouse emissions and traffic congestion are one of the most significant challenges we face today - and the way we deliver our goods and freight services and move around the city plays a massive role in this.

Addressing sustainability and digital considerations in urban freight transport may help city planners to facilitate last-mile delivery and servicing in the context of urban mobility, through improved design, dynamic use of infrastructure and an appropriate mix of policy tools.

Our uniquely named project DISCO aims to support cities in undertaking the Physical Internet transformation of urban logistics and sustainable planning and to optimally and strategically manage urban and peri-urban space.

Key facts:

Duration: May 2023 – October 2026

Consortium: 47 partners

Total funding: €8,000,000

Our partners

DISCO is a collaboration between 47 partners: cities, technology and service providers, industry and SMEs, real estate companies, research organisations and universities, and network organisations. The project is coordinated by FIT Consulting.

AKKODIS · alice Alliance for Logistics Innovation through Collaboration in Europe · Ajuntament de Barcelona · ACS

AJUNTAMENT DE VALÈNCIA · Missions València 2030 · LAS NAVES · ALIA Cluster Logístico Aragón · A2B

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FUNDACIÓN VALENCIAPORT · FZC FUNDACIÓN ZARAGOZA CONOCIMIENTO · fit · HOUT & BOUW OPLEIDINGSCENTRUM · ghent:

imec · inlecom · ITL · INTERNATIONAL DATA SPACES ASSOCIATION · KLU

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For more Information

Visit our website and follow us on social media:

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DISC O

Data-driven and Dynamic Space and Assets for Physical Internet-led Urban Logistics and Planning

urban freight data space

Meta Model Suite

DISCOPROXI Shared Lands

DISCOESTATE Multi-purpose and temporary use of buildings

DISCOLLECTION Smart data collection

DISCOCURB Mixed use and dynamic streets space management

DISCOBAY Multimodal bays

DISCO's approach: the Meta Model Suite

DISCO stands for 'Data-driven, Integrated, Syncromodal, Collaborative and Optimised urban freight meta-model for a new generation of urban logistics and planning with data sharing at European Living Labs'. Our aim is simple: to support the EU mission cities in achieving their climate goals by 2030, letting our living spaces breathe new life away from air pollutants.

How? We will drive EU Cities towards a Physical Internet (PI) approach that aims to overcome possible trade-offs between the accessibility of goods and services, quality of life and environmental aspects necessitating fewer kms travelled to deliver the same amount of goods.

23 data-driven innovation measures will be demonstrated across our Living Labs, pertaining to **five domains** in our Meta Model Suite:

DISCOCURB — Curb side management

DISCOPROXI — Proximity based last mile solutions

DISCOESTATE — Optimised use of underutilised buildings for last mile logistics operations

DISCOBAY — Explore potential of various transport modes as microhubs for parcel traffic

DISCOLLECTION — Advanced real time data collection methods

These use cases are located within the Urban Freight Data Space, which is a decentralized IDS based ecosystem that enables urban logistics and mobility actors to seamlessly share data with each other on a secure and sovereign manner.

A new generation of urban freight at European Living Labs

We will develop 23 solutions on optimal and flexible use of urban space for logistics in 8 European Living Labs:

Starring Living Labs (Step 1 Demonstration)

Copenhagen (DK)
► Use of shared transport facilities as urban micro-hubs and open consolidation hubs through real time data collection by logistics service providers.

DISCO-X involved:

Ghent (BE)
► Public-Private cooperation for dynamic, data-driven and automated communications, incentivising effective and zero emission operations in last-mile deliveries.

DISCO-X involved:

Thessaloniki (EL)
► Multipurpose, multi-tenant and temporary use of buildings as logistics hub, supported by optimally located smart data collection via road sensors, to help detect freight flows and zero-emission freight transport.

DISCO-X involved:

Helsinki (FI)
► Multifunctional micro-hubs with network management and flexible use of space promoting use of zero-emission freight transport modes (bikes and vans) to implement dynamic Low Emission Zones.

DISCO-X involved:

Twinning Living Labs (Step 2 Demonstration)

Padua (IT)
► Dynamic urban space re-allocation adopting modular lockers and coordinated network in real-time with logistics service providers.

DISCO-X involved:

Spanish Cluster: Barcelona, Valencia, and Zaragoza (ES).
► Boosting advanced B2C/B2B last-mile for local commerce valorising micro-hubs in underused spaces, powered by smart predictive models and operated by zero-emission vehicles and smart curb side use, generating green business opportunities.

DISCO-X involved:

Barcelona:

Valencia:

Zaragoza:

Follower Cities (Step 3 Demonstration)

► 4 Follower Cities will be early adopters of DISCO solutions to scale up their deployment and replicability.
Prague (CZ)
Piacenza (IT)
Aarhus (DK)
North Hesse (DE)