

White label urban consolidation

Which governance modal for sustainable urban logistics?

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POLIS | ANNUAL
CONFERENCE
2024
CITIES AND REGIONS FOR TRANSPORT INNOVATION

27-28 NOVEMBER 2024

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- Keystones of urban logistics
 - Urban logistics as a system
 - Horizontal collaboration?
-
- Can the role of cities be a gamechanger?
 - Multi stakeholder collaboration by a neutral orchestrator



The Urban Logistics System

Guiding principles

Key principle for urban logistics	Motivation - clarification	Main goal
Consolidation	Bundling, clustering and pooling – asset or capacity sharing – collaboration - “more with less”	Scale - efficiency
Decoupling	Transshipment – replenishment & last mile & last-last mile – from supply-driven towards demand-driven	Agility
Multimodal	Combination of various transport networks (road, rail, water, underground and air) – various vehicle types – integration - synchronisation	Sustainability
Connectivity	City of Things (cfr. IoT) – hub & spoke – hyperconnected network – data sharing – community or ecosystem design	Robustness
Open access	Standards and harmonization – protocols - infrastructure on public domaine - neutral assets – white label – common assets	Effectiveness
Public-private	Urban logistics deal – alignment – multilateral agreement – multi-stakeholder covenant	Balance
Orchestration	Governance – organization of collaboration – community or ecosystem building and management - monitoring	Fairness

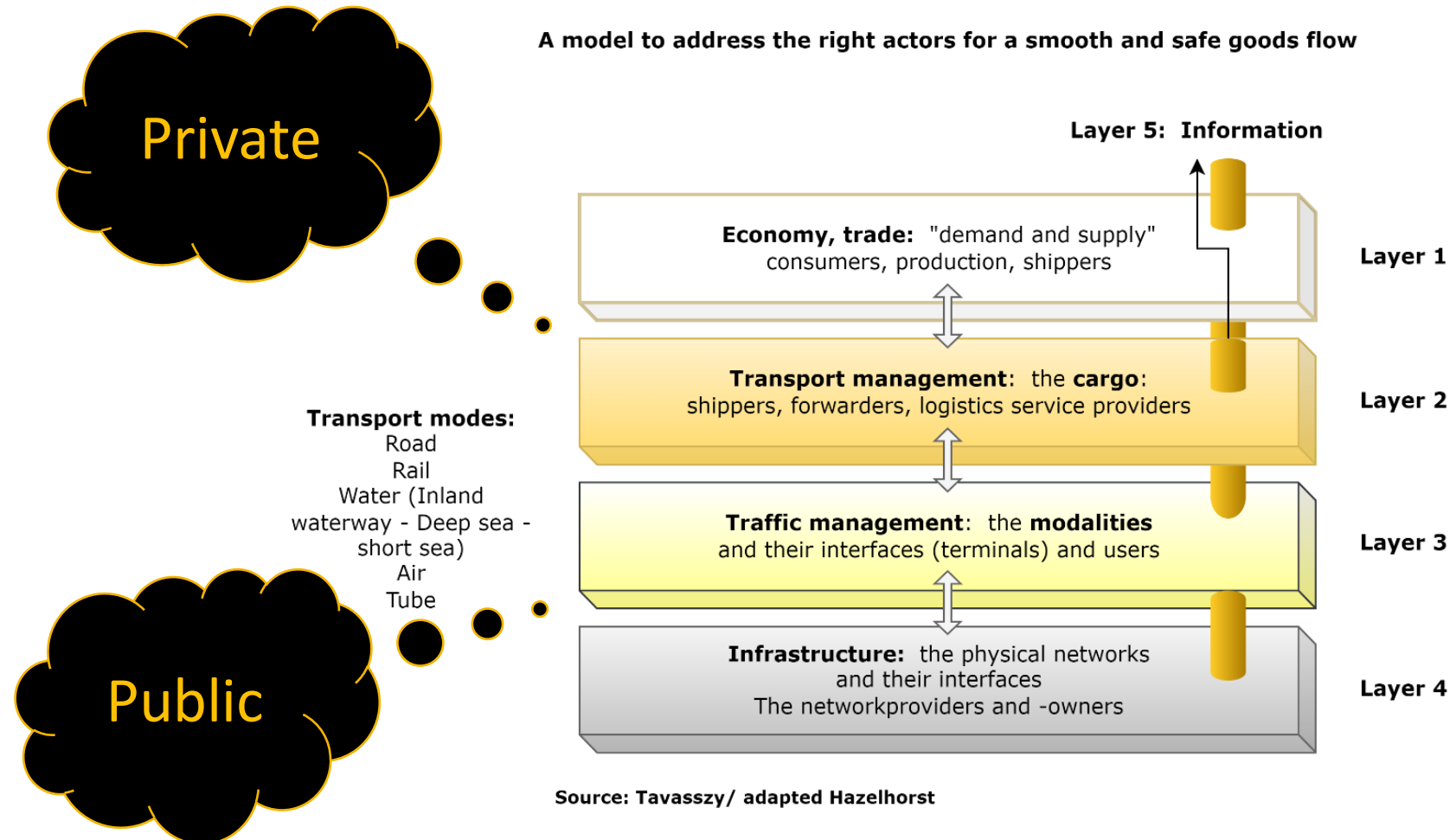


The Urban Logistics System

Public-private dichotomy

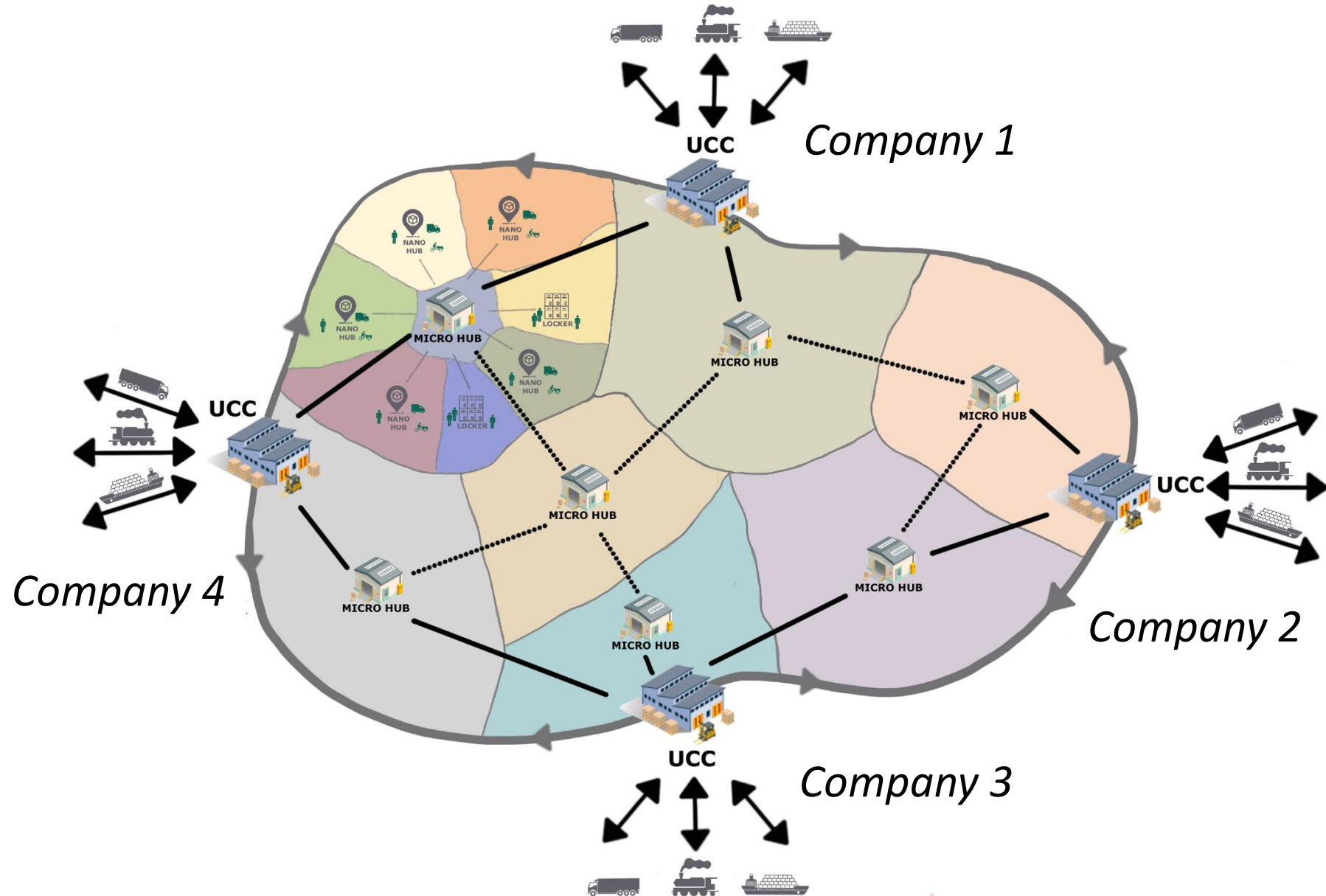
Integrated logistics conceptual model (ILCM)

A model to address the right actors for a smooth and safe goods flow





The Urban Logistics System





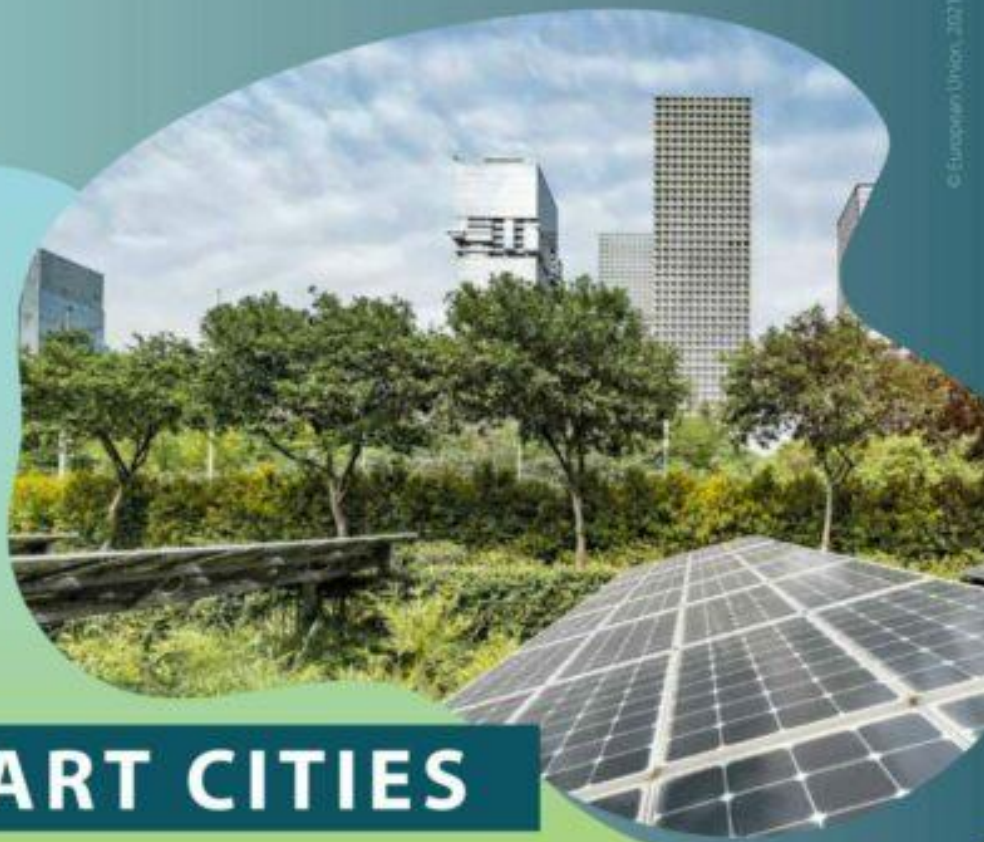
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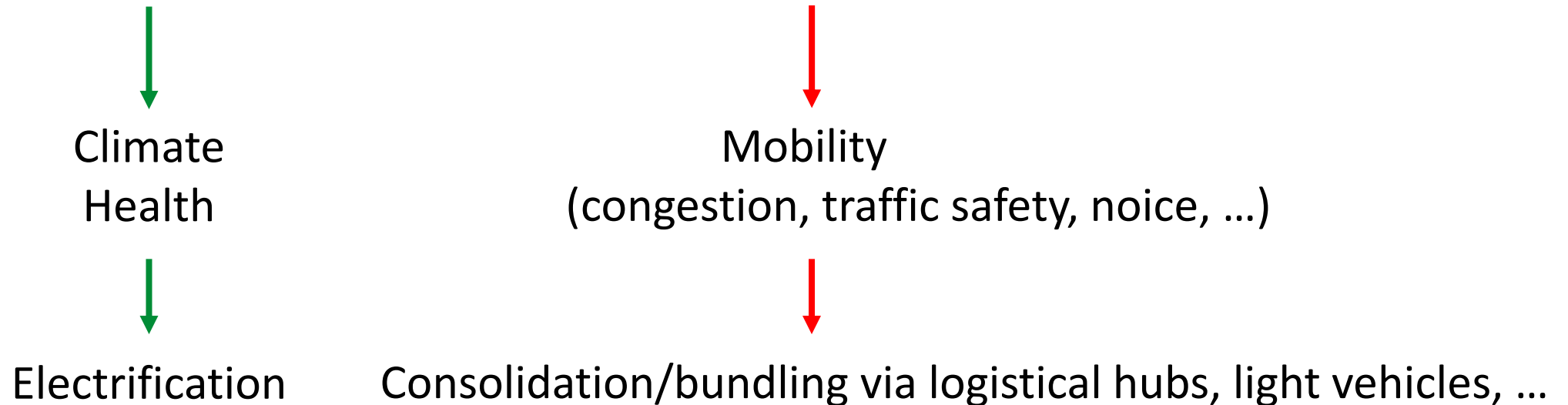
Sustainable urban logis

LEUVENSE **LEUVEN 2030**  leuven
**KLIMAAT
CONTRACT**



- Europa – Flemish Region (AFIR, LEZ, ...)
- Climate City Contract – City of Leuven – “white label” urban logistics

Greening trips – Reducing trips – Modal Shift



Focus Europe, regions on greening

(Neutral) digital en physical platforms for Reducing and Shift



CARS



ELECTRIC CARS



AUTONOMOUS CARS



UBER/LYFT CARS

(Local) authority as neutral orchestrator

Digital / Data

1. Access rights UVAR's -> DAC (dynamic access rights)
2. Flex curb management
3. Digital consolidation platform (Wij.Leveren)

Physical / Space

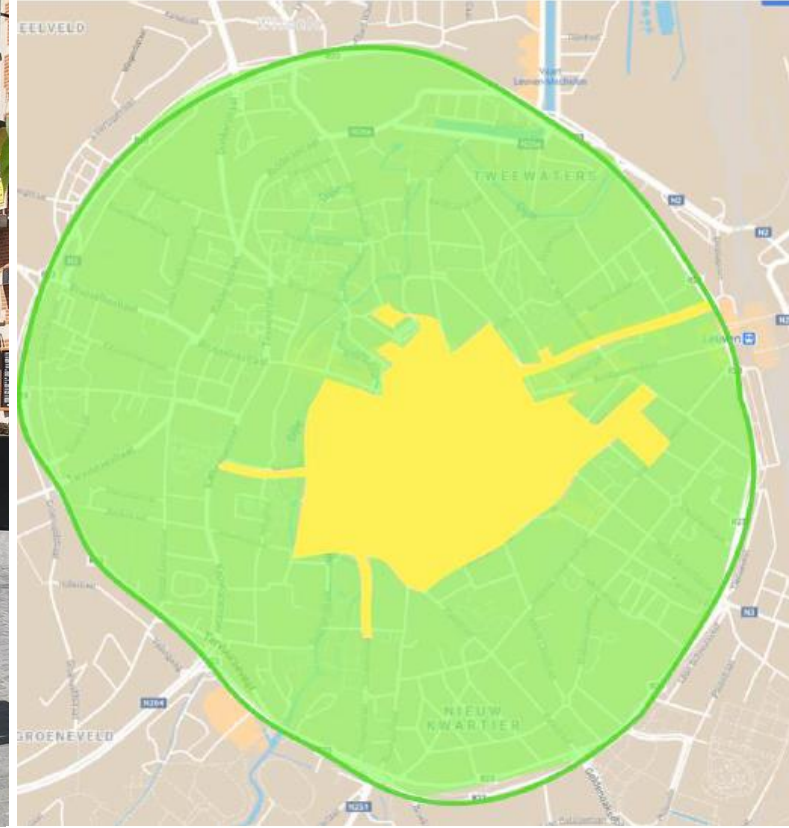
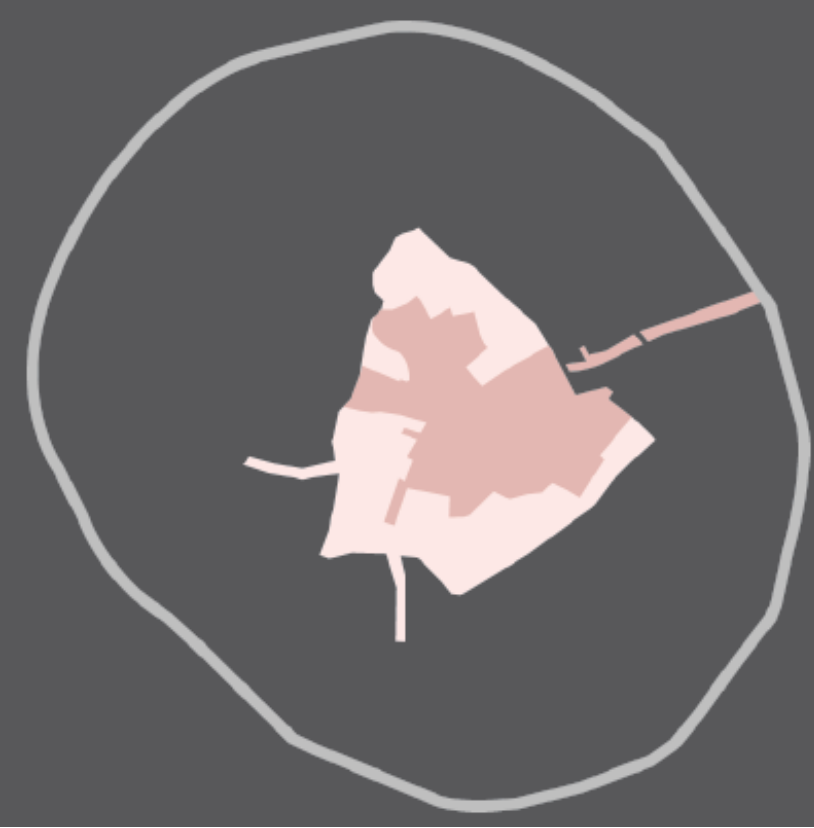
4. Physical consolidation
 - ✓ Microhubs (= white label parcel lockers / delivery points)
 - Flex / Mobile Hubs
 - Urban Consolidation Centre (UCC)

Indispensible conditions for Trip Reduction and Modal Shift

- ✓ Data management of information sharing platforms by a neutral party (Trustee)
- ✓ Spatial management of the public domain by local authority (microhubs, flexhubs)
- Offering/managing physical consolidation at the city edge (UCC)

Digital consolidation

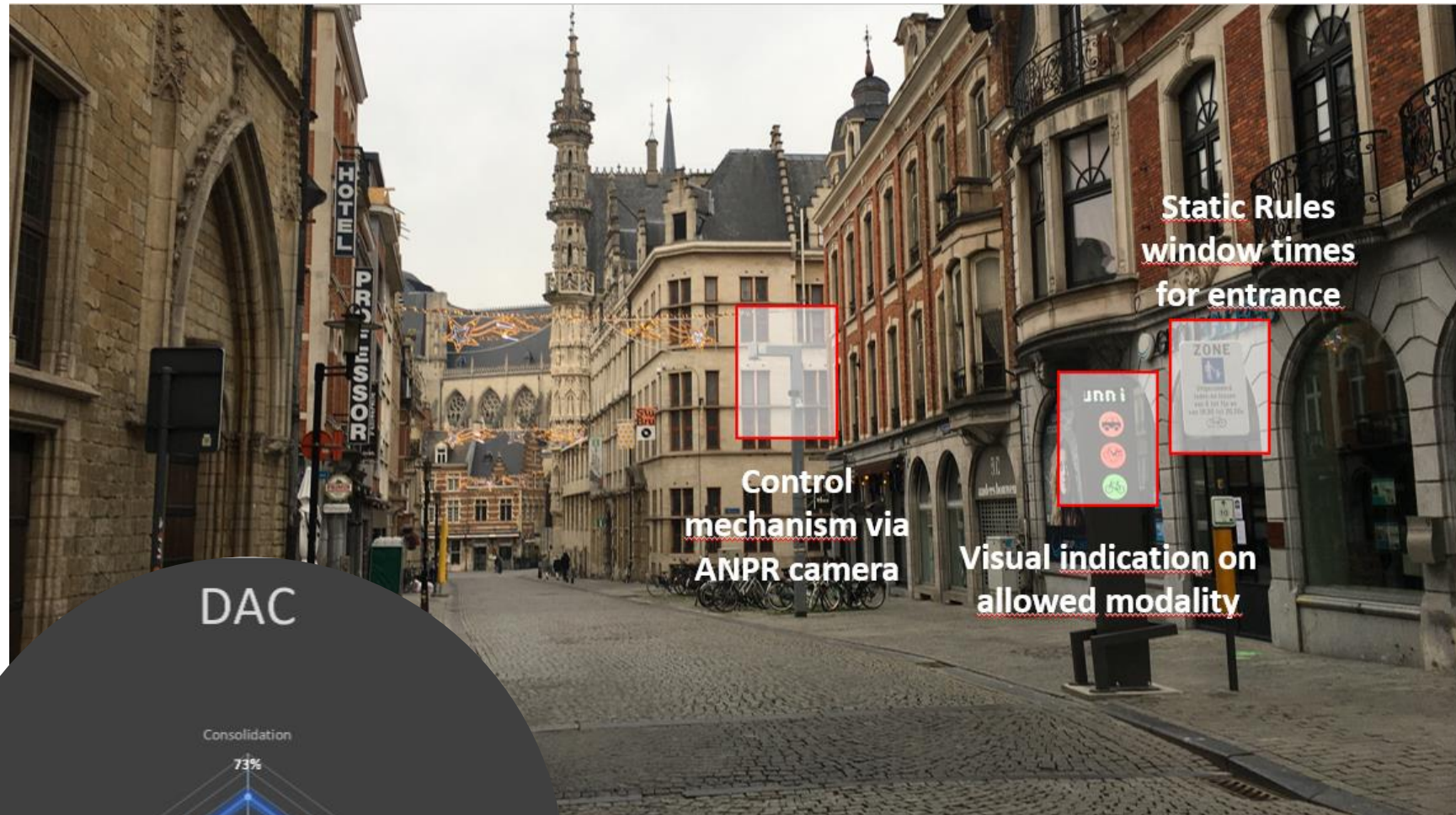




Zero-emission zone / zero emission delivery bpost

- Pedestrian zone doubled
- Access controle by ANPR
- Delivery window times (11h – 18h30)
- Access rights (taxi, disabled, care, ...)



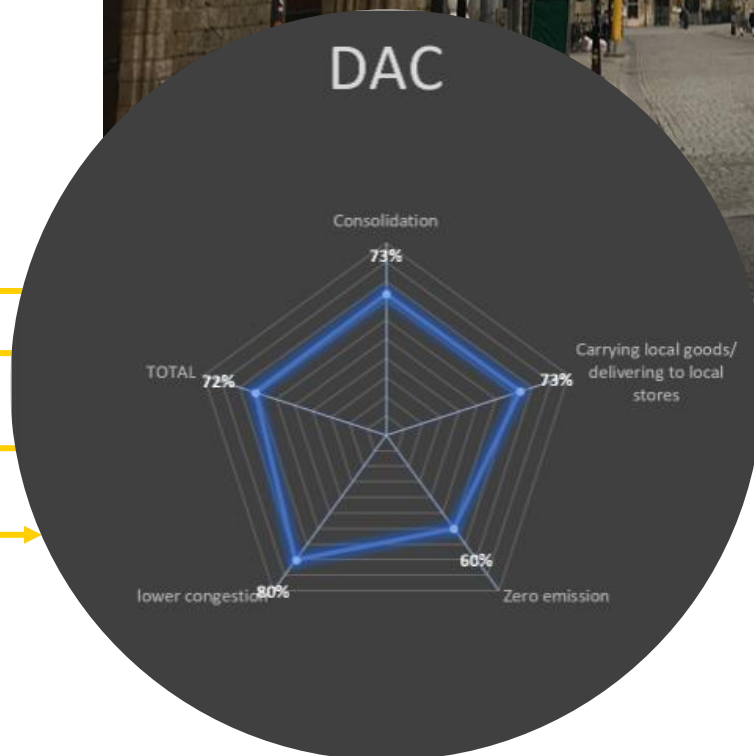



Consolidation 73%

Local 73%

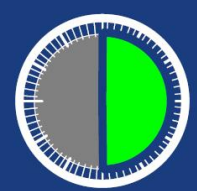
Emmisions 60%

Congestion 80%



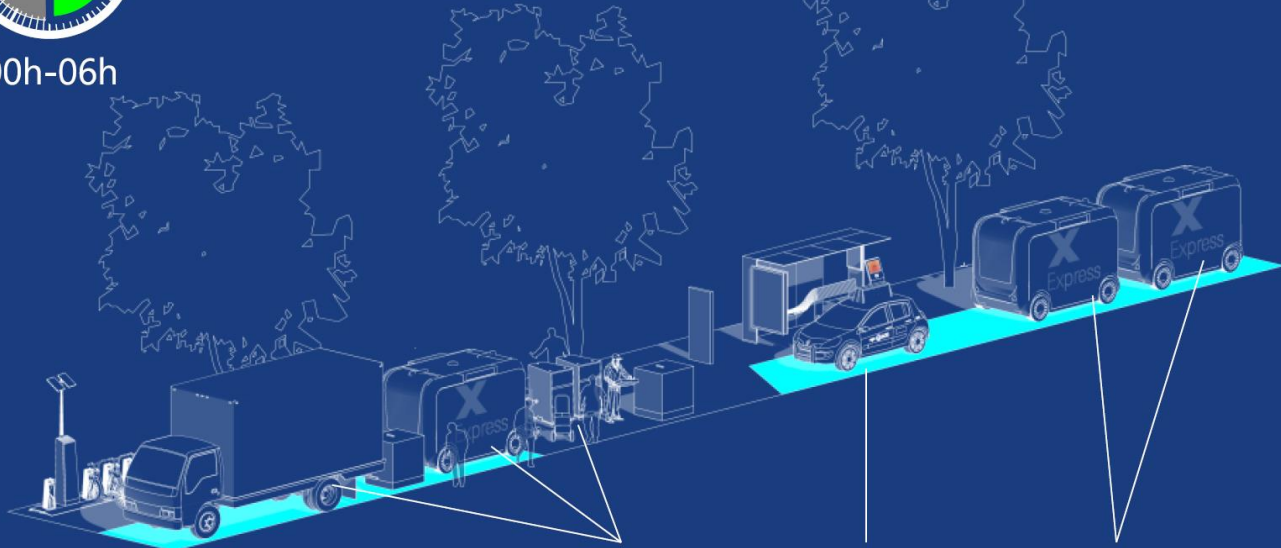
 **Token** (Horizon-EU)

- UVAR's
- DAC (Dynamic Access Rights)
- Trustee datamanagement

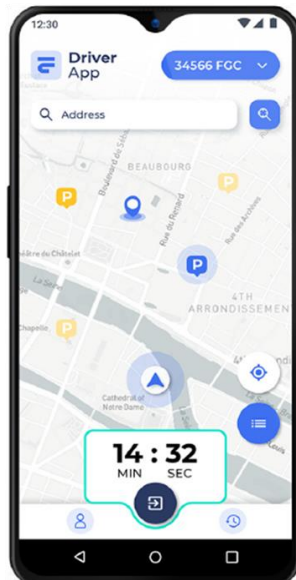
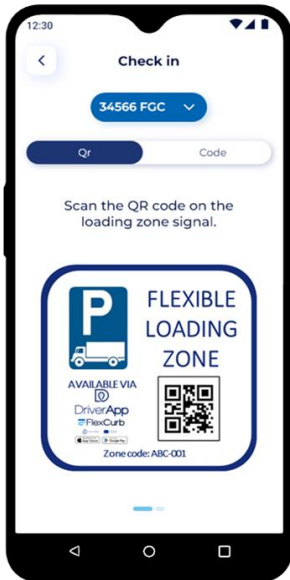


the curb: flexible use zone

00h-06h



Goods delivery Taxi/ride service Goods delivery



Local authority as neutrale orcherstrator

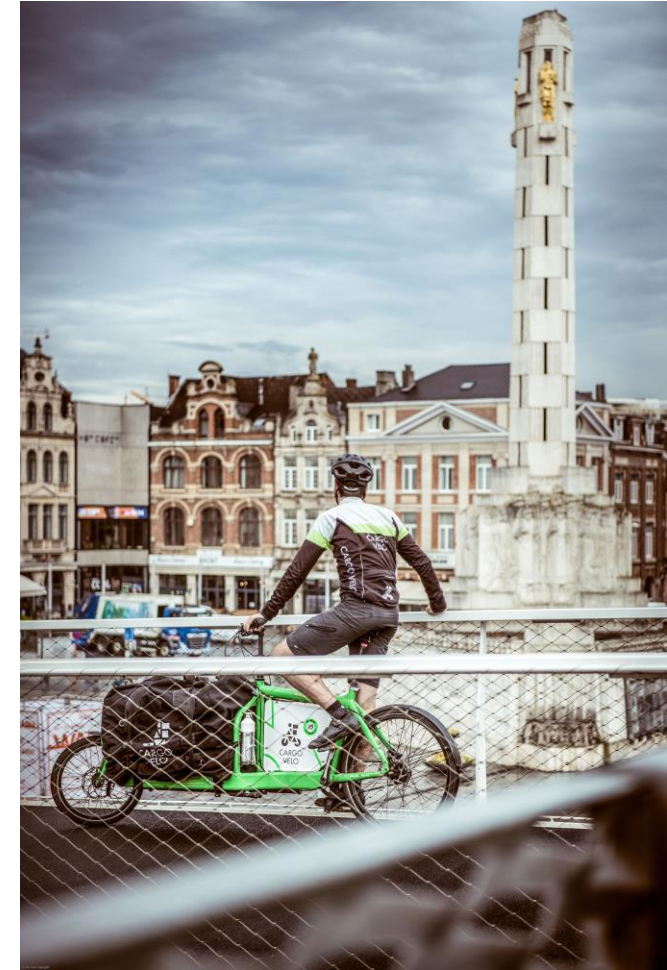
- White label digital deliver platform
- White label parcel lockers
- <https://www.wijleveren.be>



Wij.leveren to day – city is (neutral) orchestrator

- 100 + local shops
 - 6000 + deliveries (10% local first mile)
 - Deliveries by **bpost** en **local bicycle couriers**
 - Integration local webshops with Wij.Leveren platform (API's)
-
- = Digital platform
 - = Unburden local shop keepers / support local e-commerce
 - = Sustainable first mile urban logistics (zero-emission, consolidation, shift)
 - ≠ last mile, expanding type of goods (food, waste, ...)

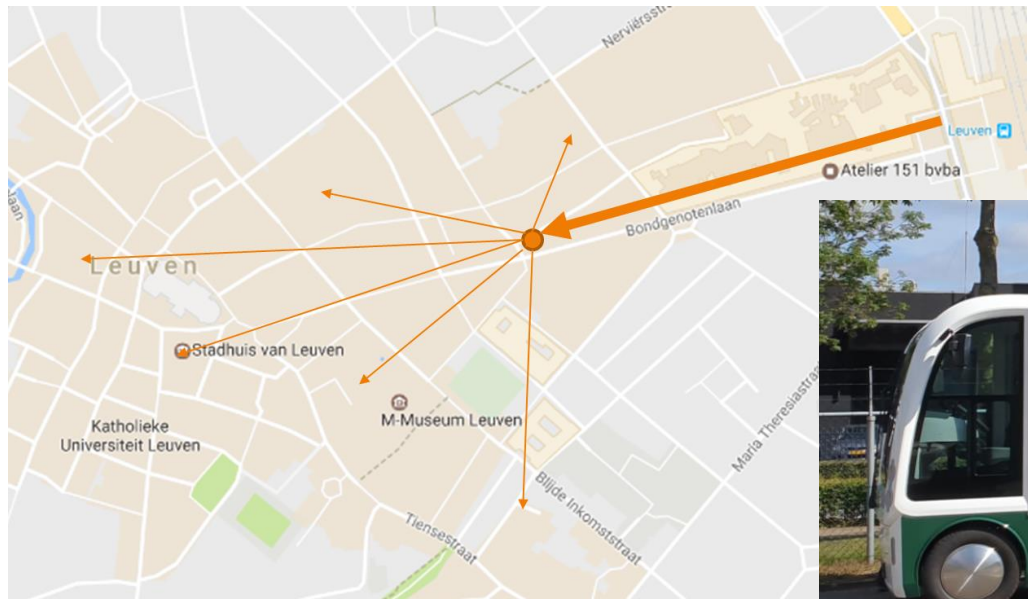
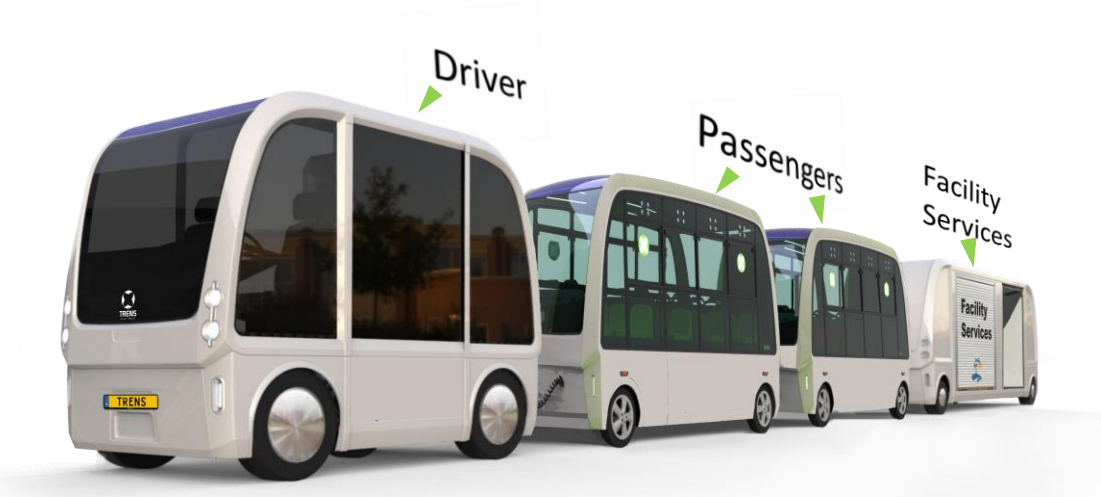
Need for physical platform HUB / UCC



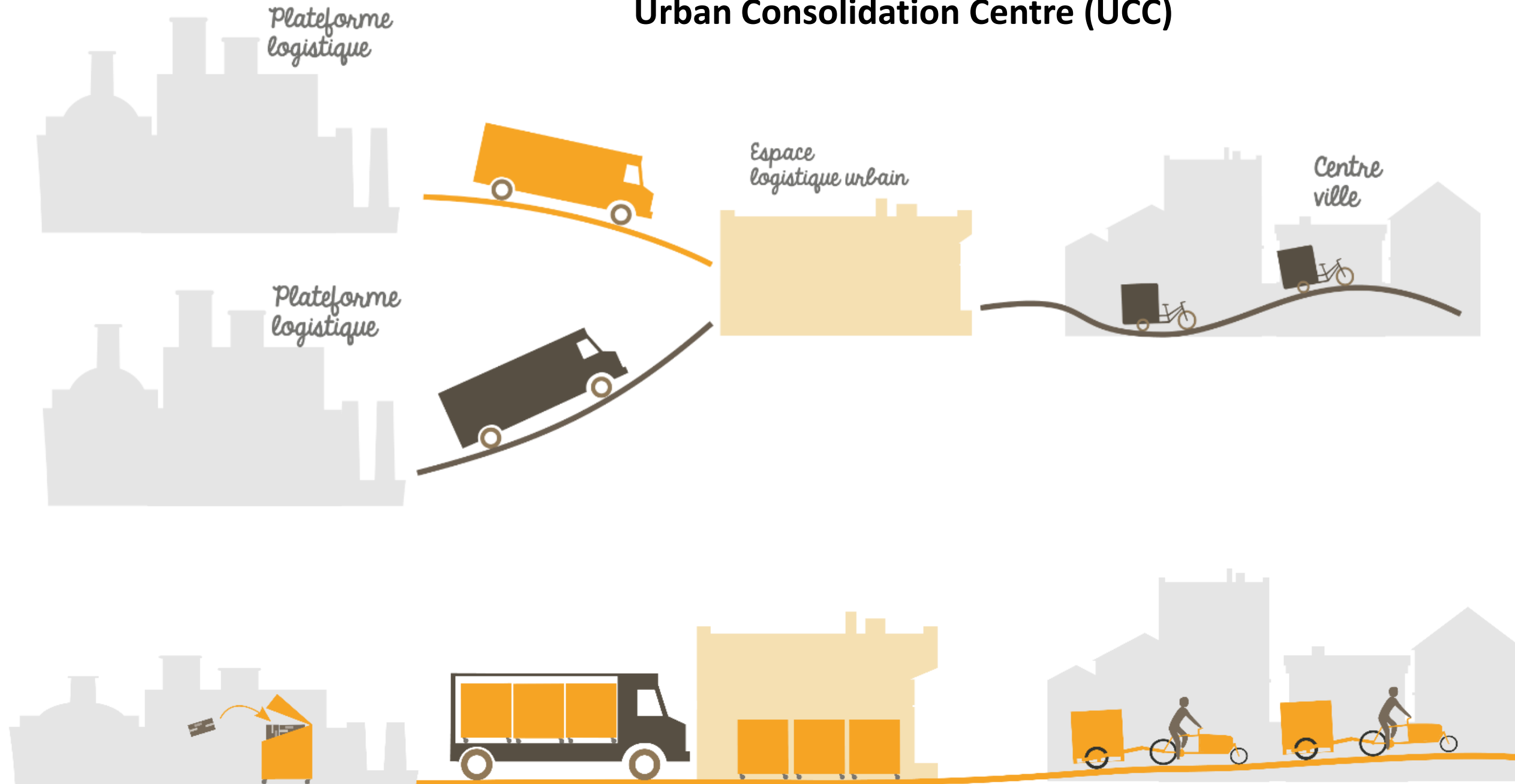
From digital to physical consolidation






Micro HUBs - FlexHUBs – Multi-purpose



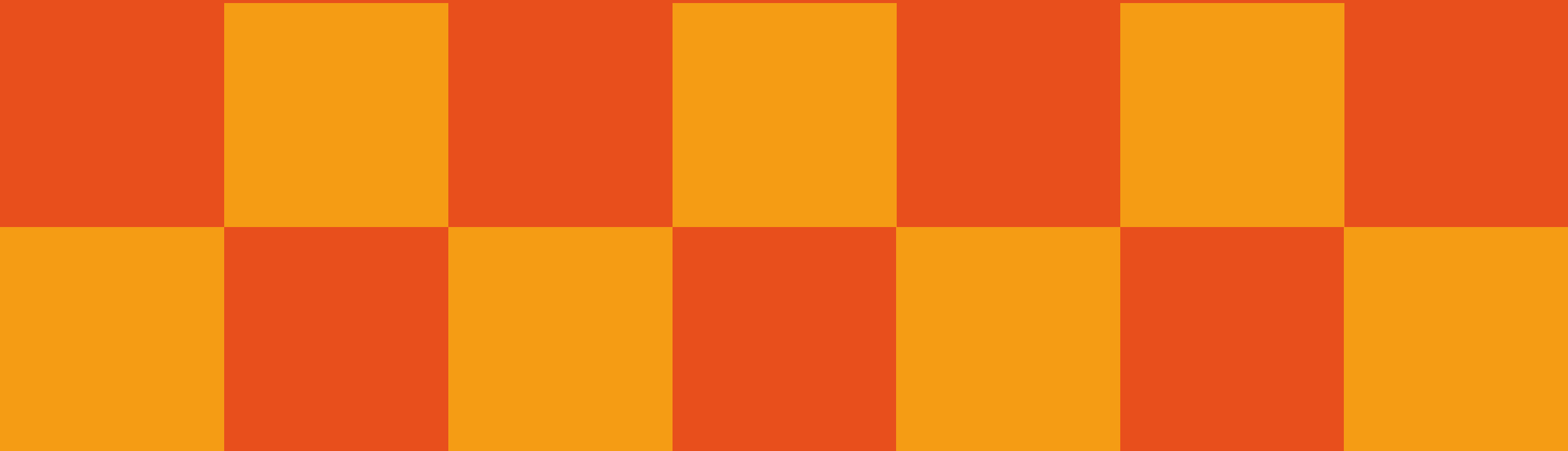
Urban Consolidation Centre (UCC)





-  Stadsdistributiecentrum
-  Zoekzone city depot
-  Microhub

Conclusions



- Urban logistics as a system
- Physical Internet as a new deal
- Multi stakeholder collaboration through neutral orchestrator
- Authority as regulator (e.g. UVAR's)
- Authority as facilitator (e.g. Flex curbside management)
- Authority as orchestrator (e.g. data sharing platform, micro Hub, UCC, ...)