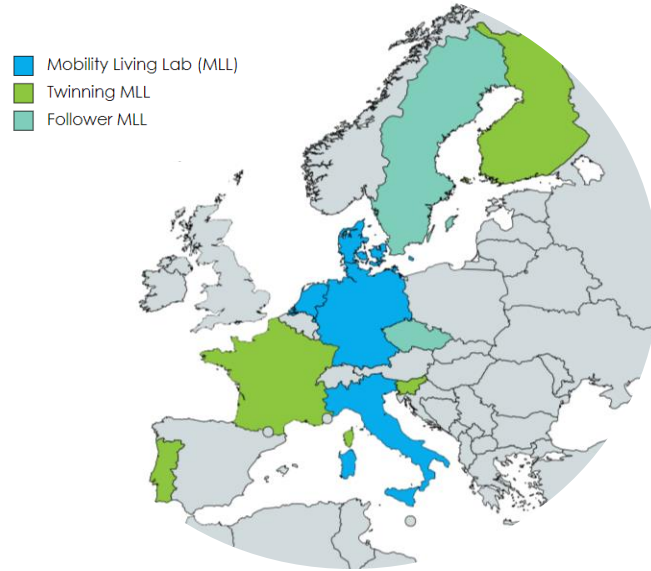


# URBAN MOBILITY DAYS 2023

## PROJECT PITCHES

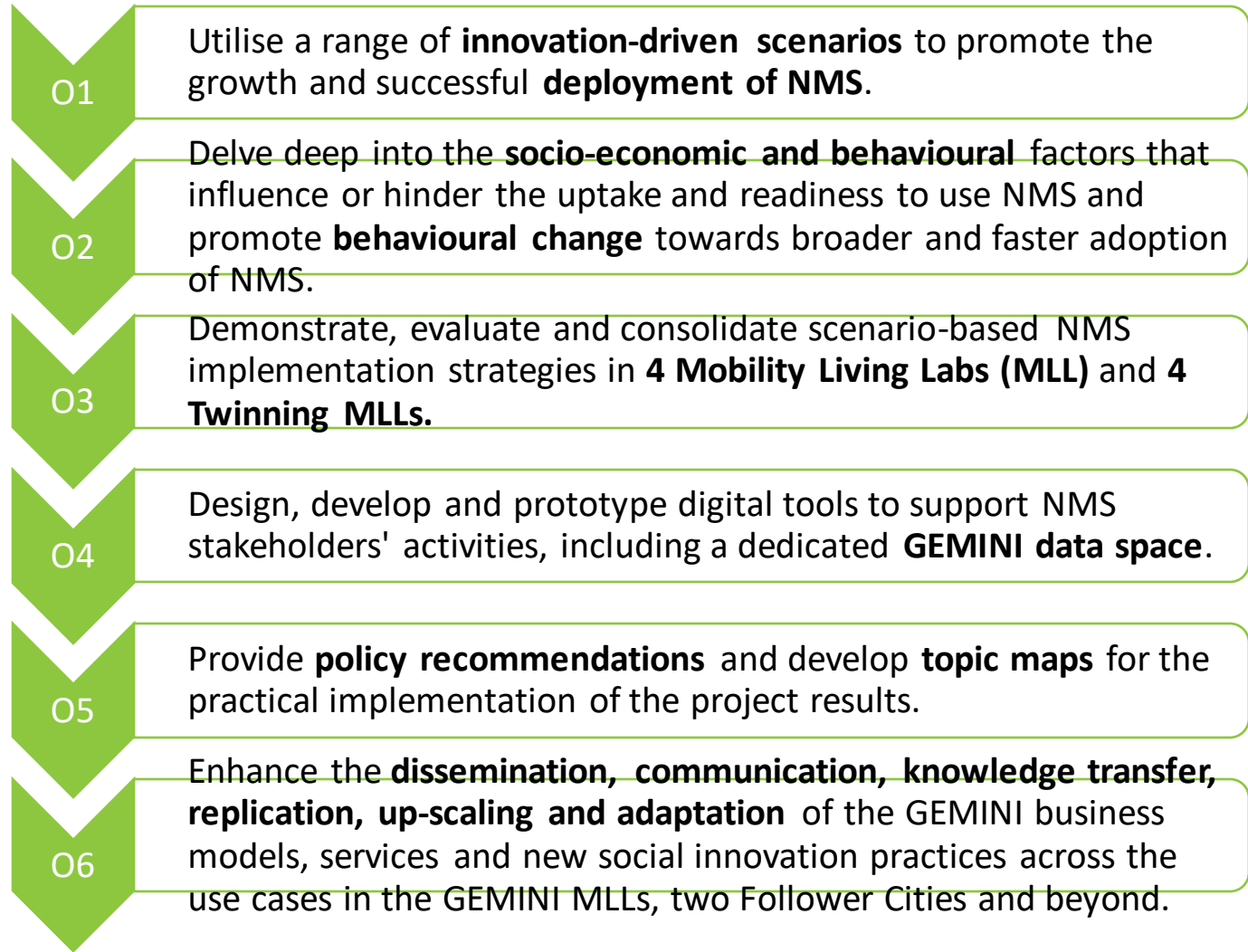


# GEMINI



Foster progress towards **climate neutrality** by reinforcing modal shift through:

1. **MLL** demonstrations of new shared mobility services, active transport modes, and micro-mobility,
2. and their **integration with PT** in new generation MaaS services.



# Cooperative and Interconnected Green delivery solutions towards an era of optimized zero emission last-mile Logistics



HORIZON-CL5-2021-D6-01-08

6,260,158.00 (EU contr.)

Netcompany-Intrasoft S.A

42 months (01/2023-06/2026)

10 countries (EU & UK)

29 partners (EU & UK)

**GREEN-LOG aims to accelerate systemic changes and create last-mile delivery ecosystems that are economically ecologically and socially sustainable.**

## Objectives

1. Design sustainable and cost-efficient cooperative last mile delivery solutions.
2. Enable last mile delivery ecosystems to design, test and configure last mile interventions to achieve sustainable businesses, road transport efficiency and environmental goals.
3. Manage and optimize last mile delivery and road transport efficiency in real time through dynamic and interconnected services and interfaces.
4. Demonstrate the GREEN-LOG approach and last mile delivery solutions in five representative living lab cities and areas.
5. Accelerate the large take up of the GREEN-LOG last mile delivery solutions through continuous impact creation activities.

**60%**  
of the world population will live in urban areas

**78%**  
growth through 2030 in urban last-mile deliveries

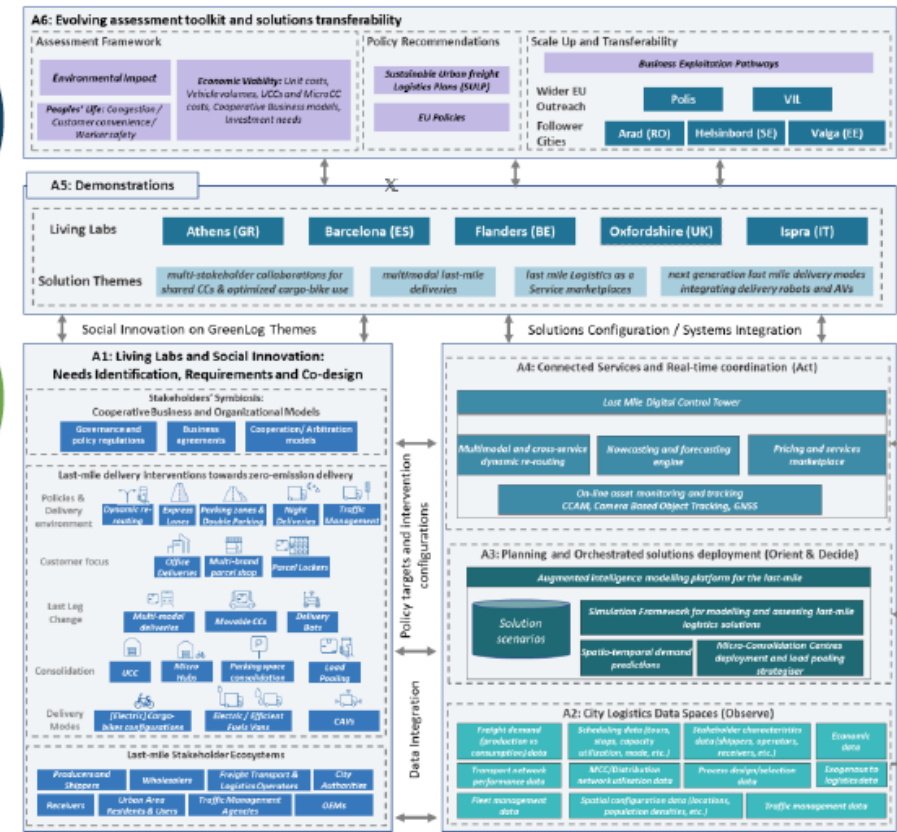
## 5 Urban Living Labs

- Multi-stakeholder collaborations for shared MCCs and optimised cargo-bike use **Athens, GR**
- Multimodal last-mile deliveries **Barcelona, ES**
- Last-mile Urban Logistics-as-a-Service **Flanders (Ghent, Mechelen, Leuven), BE**
- Next generation last-mile delivery integrating cargo-bikes and AVs **Oxfordshire, UK**
- Next generation last-mile delivery integrating delivery robots **Ispra, IT**

## 3 follower cities

- Transferability and Adaptability **Arad (RO), Helsingborg (SE), Valga (EE)**

## The GREEN-LOG approach



## Website & Social Media

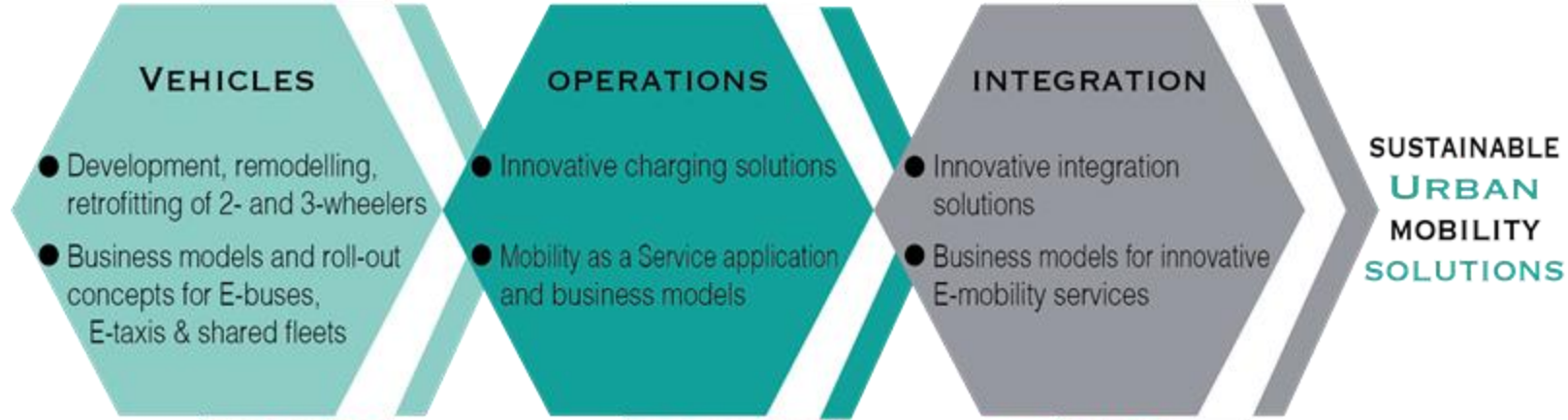
<https://greenlog-project.eu/>

GREEN-LOG @GREENLOG HE

## Contact the PC team

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# Accelerate transformational change towards sustainable urban mobility through innovative and integrated electric mobility solutions



**BUSINESS OPPORTUNITIES, INDUSTRY PARTNERSHIPS, ALLIANCES OF LOCAL AND NATIONAL GOVERNMENTS, BANKABLE PROJECTS**



- **Project overall duration: 48 months**
- **Start date: 1/1/2023**
- **Total person month: 2823**
- **EU Grant: 22,776,213.57**
- **Partners: 45**
- **Strategic and overall operational Coordinator: UITP**
  - **Technical Manager: VUB (MOBI-EPOWERS RG)**

**Main objective:** Create a New Generation of advanced full electric, urban and peri-urban European BRT enhanced with novel automation and connectivity functionalities.

6+1 operation-focused Demos: Barcelona, Athens, Prague, Rimini, Amsterdam, Eindhoven & Bogota

**eBRT2030 project aims to reduce:**

- Cost/km/passenger by 10%;
- TCO by 10%;
- Greenhouse gas and pollutant emissions by 70%, and
- Traffic congestion by 10%

**Technological Innovations:**

- **Vehicle**
- **Charging**
- **IoT Connectivity**





## 6 OBJECTIVES

## 8 PRODUCTS

## 7 EU CITIES ALONG 2 TEN-T

- DESIGN OPTIMISATION OF CHARGING NETWORKS WITH A USER-CENTRIC APPROACH
- DEPLOYMENT OF AN INTEROPERABILITY FRAMEWORK AND PLATFORM
- SCALABLE INFRASTRUCTURE ROLL-OUT BY MEANS OF SMART GRID INTEGRATION
- DEVELOPMENT OF INNOVATIVE AND HIGHLY CONVENIENT CHARGING SYSTEMS
- DEMONSTRATION OF NOVEL BUSINESS AND MARKET MODELS
- LEGAL AND REGULATORY RECOMMENDATIONS FOR MASSIVE EV DEPLOYMENT

Soft

**INCAR** – Interoperability, charging and parking platform

**SMAC** – Smart Charging tool

**CLICK**- Charging location and holistic planning kit

**INSOC** – Integrated solar DC charging for Light Electric Vehicles (LEVs)

**INDUCAR** – Inductive charging for e-cars

Hard

**Stations of the future** handbook

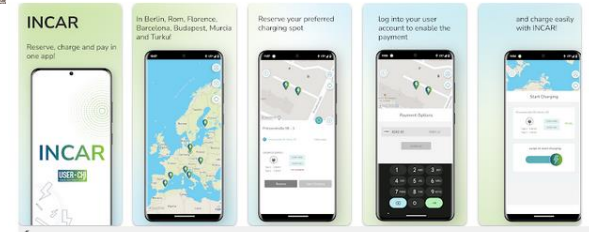
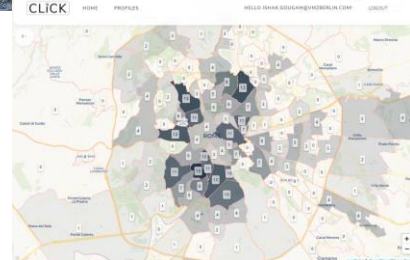
**eMoBest** – e-Mobility replication and best practice cluster

**INFRA** – Interoperability framework

Theo

Barcelona    Budapest    Berlin    Turku    Rome

Murcia    Florence



# SHOW in a nutshell

SHared automation Operating models for Worldwide adoption



## Real-life urban pilots in 20 cities (2020-2024)



## Lessons learnt from pilots



Apply a technical verification framework for all test sites (18 use cases)



Provide recommendations for regulatory entities and application guidelines for cities, public transport, etc.



Develop novel alternative business models for CCAV deployment for urban mobility



# What do we want to achieve with The ULTIMO project?



Automated Mobility in Switzerland, Germany, and Norway



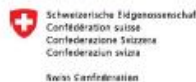
56 million euros, 23 partners, 2022 -> 2026

Unlock the integration of AVs into cities with on-demand and door-to-door services, tackling obstacles that are hindering large-scale AV uptake.

- To target the operation without safety-driver on board, in fully automated mode in three cities: [Running] **Belle idée, Geneva**, [Soon] **Herford, North Rhine-Westphalia**, and [Soon] **Grorud Valley, Oslo**. Each city with **15 or more AVs**.
- Validate integrated shared **CCAM systems & multivendor business models**
- Provide **automated passenger services** for safety and service quality
- Develop **open-source standard API's** to enhance agnostic **integrations (MaaS/LaaS)**
- Set the basis for a common and reusable model for **High-Definition (HD) maps**



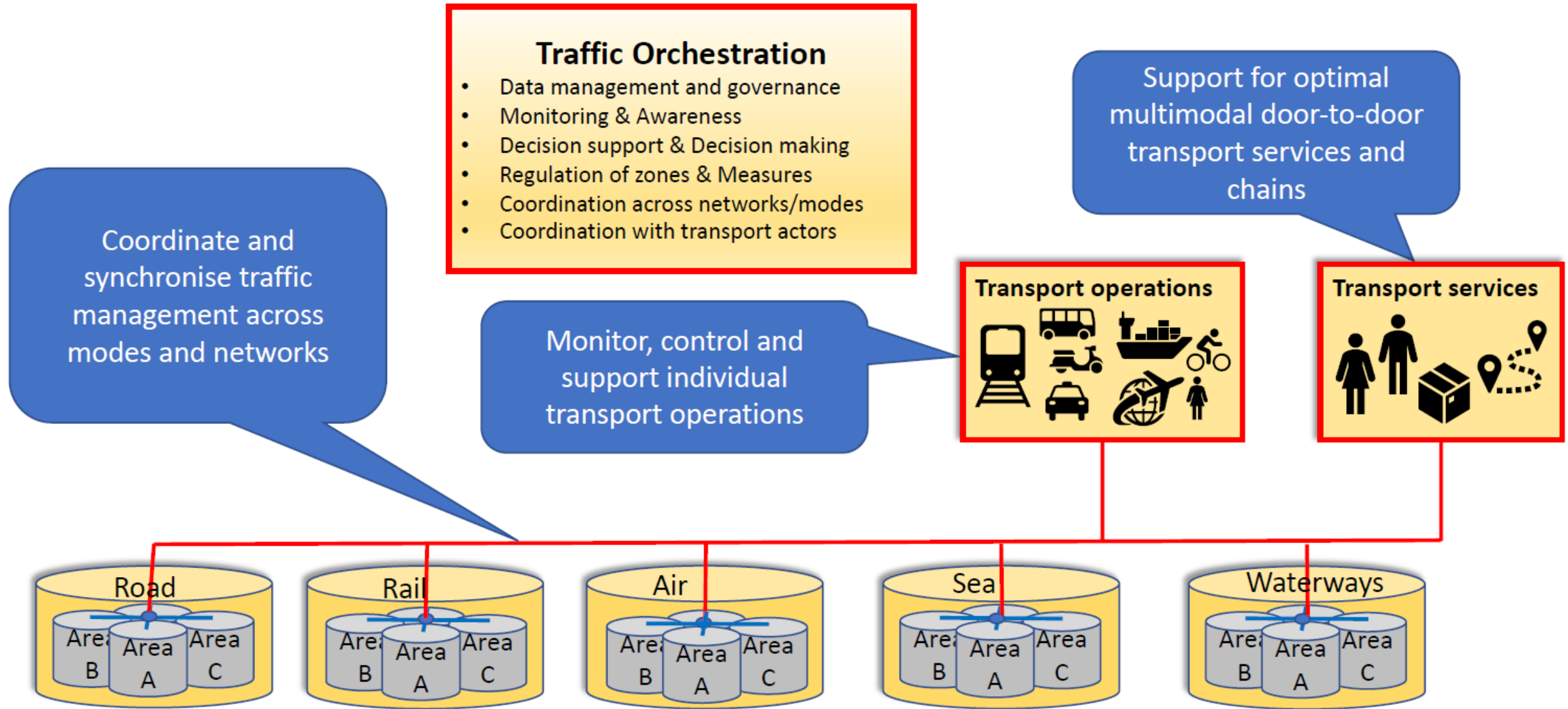
Project co-funded by



Federal Department of Economic Affairs, Education and Research EAER  
State Secretariat for Education, Research and Innovation SERI

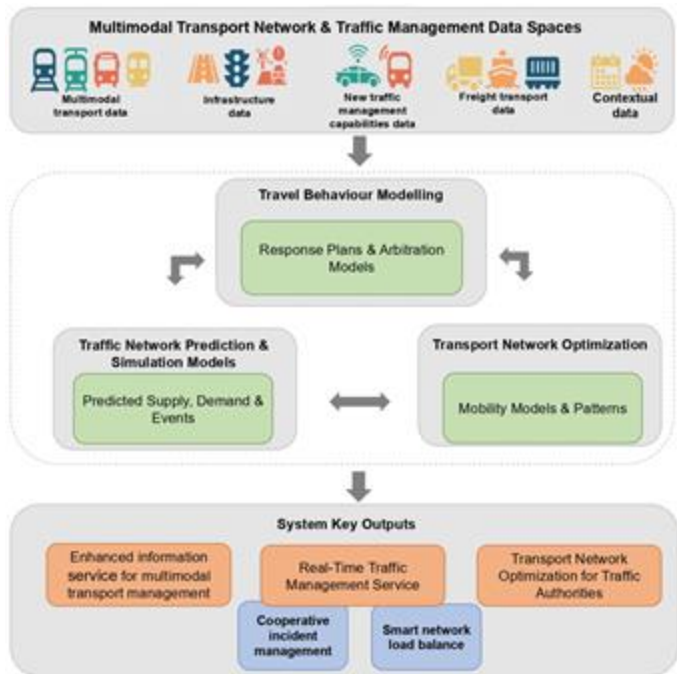


# Traffic Orchestration = Extended Traffic Management

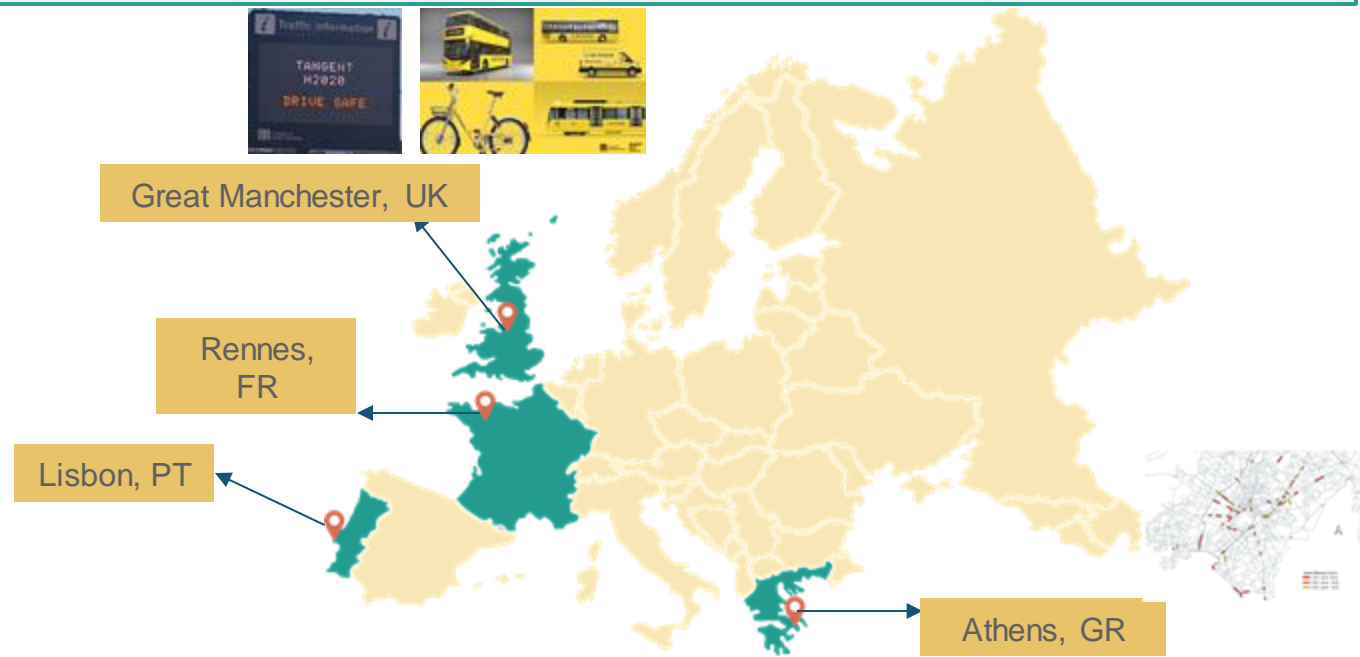


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 953618. The content of this presentation reflects only the author's view and the Agency is not responsible for any use that may be made of the information it contains.

# TANGENT - Enhanced Data Processing Techniques for Dynamic Management of Multimodal Traffic



TANGENT aims to develop new tools for optimizing the operations in traffic management of the transport network in a dynamic and adaptive way from a multimodal perspective and considering motorized and non-motorized users as well as automated/non-automated vehicle.



- Traffic update dissemination using VMS in Great Manchester and Bee Bus Network alignment for traffic state prediction and network optimization
- Mobility Survey conducted and Vehicle demand analyzed during NOS 23 event in Lisbon
- Investigated the impacts of CAVs (and CCAM in general) towards mitigating the impacts of a disturbance in Athens
- Multi-actor cooperative strategy buildup carried out in Rennes

TANGENT sets the targets for reduction of 10% in travel time, 8-10% in CO2 emissions, 5% of accidents, 5-10% increase in use public transport and use of active modes or 10% of economic costs due to a more efficient management.



# FRONTIER - Next generation traffic management for empowering CAVs integration, cross-stakeholders collaboration and proactive multi-modal network optimization

Interuniversity

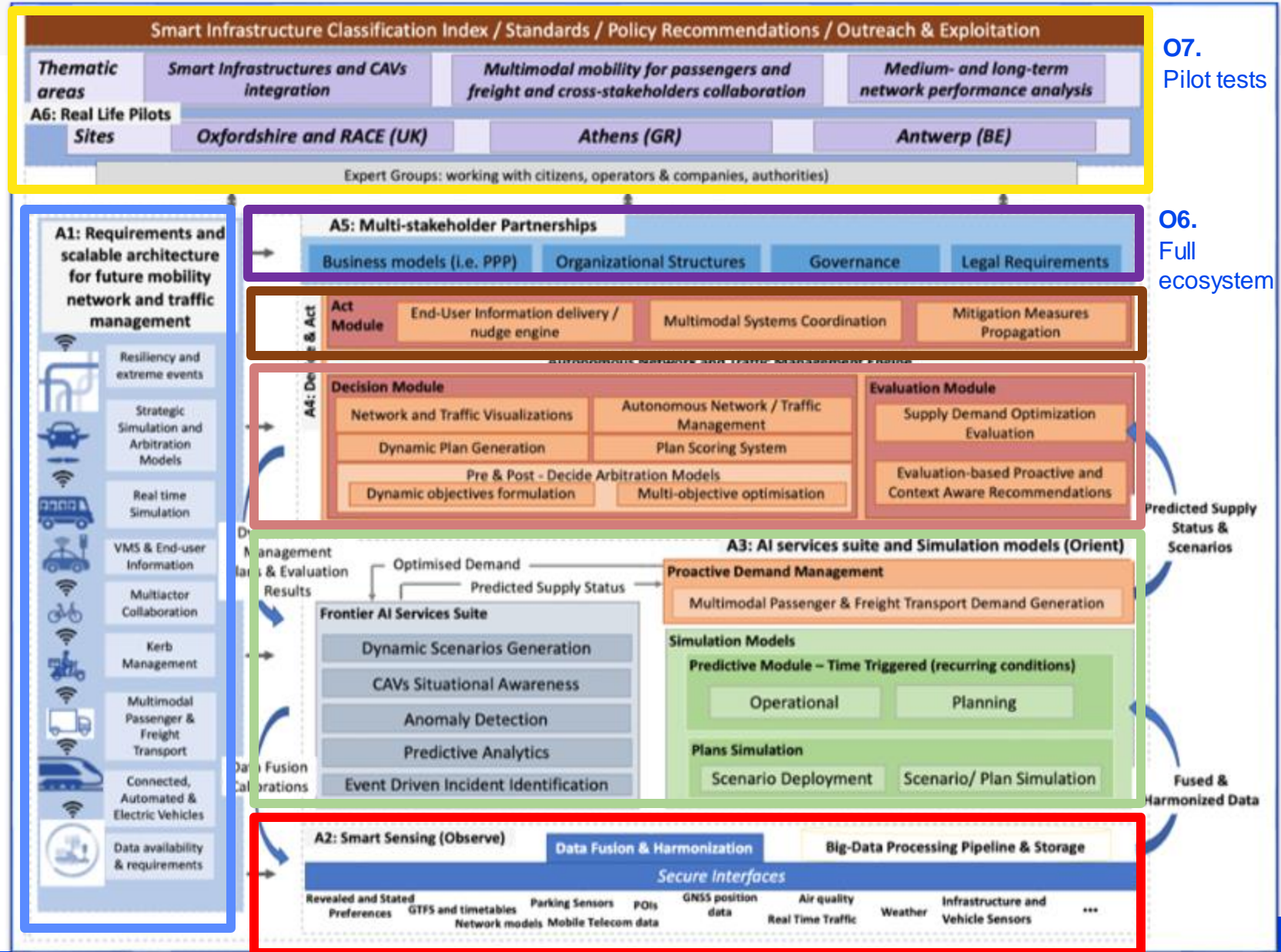
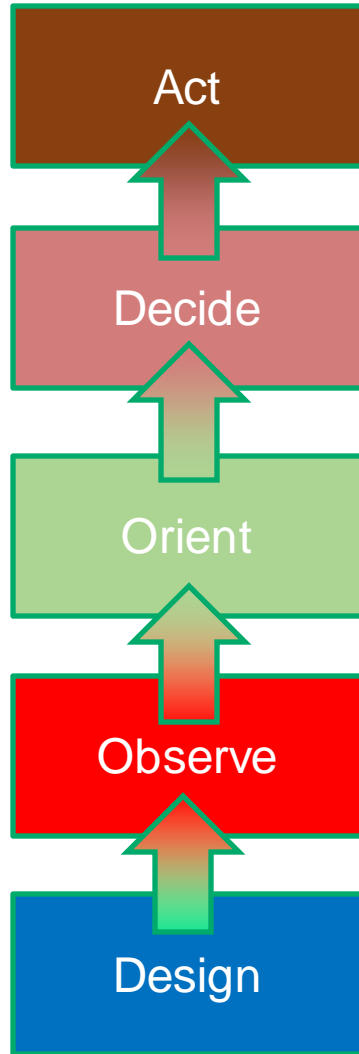
**05.** Design and develop services and interfaces for the proactive orchestration and evaluation of multimodal network and traffic management systems

**04.** Decision module to support proactive decisions and continuous performance improvement

**03.** Dynamic generation of supply scenarios and travel demand optimization through traffic simulations and data analysis algorithms

**02.** Comprehensive view of the transport ecosystem, by a smart and secure big data system

**01.** Design scalable architecture



**07.** Pilot tests

**06.** Full ecosystem

Predicted Supply Status & Scenarios

Fused & Harmonized Data



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement N° 955317