1 Jun. 2025 – 30 Nov. 2028

The project aims to optimise multimodal network and traffic management for an efficient transport network and seamless door-to-door mobility of passengers and freight. Solutions explored will cover smart data collection and management for both infrastructure and mobility/freight, integration of novel forms of mobility and services and opmisation of strategies and tools for multimodal network and traffic management.

MODALSHIFT

Multimodal Optimisation leveraging Data Acquisition from Local Stakeholders towards a Holistic Improvement of Freight and People Transport

Funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure and Environment Executive Agency (CINEA). Neither the European Union nor the granting authority can be held responsible for them.

PARTNERS OF THE PROJECT

ita Instituto Tecnológico de Aragón · AIT Austrian Institute of Technology · A-to-Be by Brisa Group · innové Innovation en énergie électrique · KEDGE Business School · Adriafer · UTAC · ID4 Mobility · imec embracing a better life · NGS IOT FOR INDUSTRY · avanza by Mobility ADO · tellae · GENEGIS GI Geographical Intelligence · Barna · OCTOPIZE Mimethik Data · euroquality A Warrant Hub Company

PROJECT AND PILOT SITES PRESENTATION

MODAL SHIFT

Two use cases

1. **DIGITAL TWIN OF MADRID'S TRANSPORT NETWORK**
   Creation of a digital twin virtually representing the Madrid transport system using open mobility data
2. **MULTIMODAL HUB INTEGRATION AT ESTACIóN SUR**
   Integration of passenger & freight transport within the Estación Sur transport hub

OBJECTIVES

- *Reduce connection delays for passengers through coordinated multimodal services*
- *Introduce Capacity-as-a-Service (CaaS), using available space in public transport vehicles to transport freight*

Who?

1. CITIZENS OF THE MADRID METROPOLITAN AREA
2. FREIGHT COMPANIES AND PUBLIC TRANSPORT OPERATORS
3. PUBLIC AUTHORITIES

USE CASES DETAILS	
AREA	8,000 KM²
INHABITANTS	6,7 MILLION

MULTIMODAL TRAFFIC MANAGEMENT (MTM) SYSTEM

To enable more agile, coordinated, and data-driven management of port shunting operations in the Port of Trieste by improving interoperability across maritime, rail, and last-mile logistics.

OBJECTIVES

- *10% increase in shunting the operation efficiency*
- *15% reduction in reaction time in the event of a late vessel or train*

USE CASES DETAILS	
AREA	84 KM²
INHABITANTS	199,311

Who?

1. ADRIAFER (ADF) & THE PORT NETWORK AUTHORITY OF THE EASTERN ADRIATIC SEA (PNAEAS)
2. RAIL& SEA INFRASTRUCTURE OPERATOR
3. CONTAINER TERMINAL MANAGER

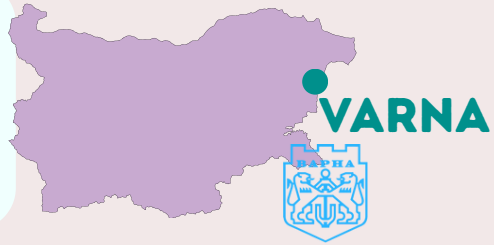
TWO USE CASES

1. **LOW-CARBON URBAN FREIGHT VIA CARGO-BIKE OPTIMISATION**
   Sensors deployment on the bikes and introduction of a Track & Trace & Monitoring (T&T&M) system combined with a Horeca-oriented "pay-per-use" sharing model.
2. **ENHANCING PUBLIC TRANSPORT AND ACTIVE MOBILITY**
   Adaptation of public transport and active mobility schedules/services to seasonal demand patterns and upcoming bike-lane developments.

OBJECTIVES

- *To enhance sustainable urban mobility and to reduce congestion in Varna by streghtening low-carbon logistics, improving intermodality, active mobility and upgrading the city's data and digital infrastructure.*
- *To enable evidence-based transport management, support seasonal demand peaks and increase the efficiency, resilience, and sustainability of Varna's overall mobility system.*

USE CASES DETAILS	
AREA	238 KM²
INHABITANTS	323,000



Who?

1. VARNA INHABITANTS AND LOCAL COMMERCIAL SHOPS
2. INSTITUTIONAL AND OPERATIONAL INSTITUTIONS
3. LOCAL COMPANIES SUPPORTING DATA COLLECTION

MODAL SHIFT