

# Insights into the DELPHI town concept and the creation of efficient governance frameworks for traffic management

#### **MTMC** Webinar

Networks and Traffic Management: current status and future developments in EU R&D activities

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# DELPHI at a glance

Key facts & Team

## **DELPHI** key facts



- Full Title: FEDERATED NETWORK OF PLATFORMS FOR PASSENGER AND FREIGHT INTERMODALITY
- Project ID: 101104263
- Call and Topic: HORIZON-CL5-2022-D6-02-05 ("Advanced multimodal network and traffic management for seamless door-to-door mobility of passengers and freight transport")
- Funded Under: Horizon Europe
- Funding Scheme: RIA –Research and Innovation Action
- Duration: 36 months, 01 July 2023 30 June 2026
- Total Cost/EU contribution: EUR 4,999,561.5
- Project Coordinator: Institute of Communication and Computer Systems (ICCS)



## **DELPHI Consortium**



DELPHI brings together a complementary consortium:

- of 16 partners (+1 associated partner and 1 affiliated entity),
- from 8 EU and associated countries

with the vision to address the growing challenges of passenger and freight mobility.







# DELPHI's vision

**Concept & Use Cases** 

## **DELPHI Concept**



DELPHI focuses on the strategic dimension of integrating passenger and freight transport in a single system, working towards integrating sectors, harmonizing data, and leveraging advanced methodologies, to transform transportation systems, for a sustainable future.

1st pillar
Governance, Ecosystem specification

2<sup>nd</sup> pillar
Architecture, Data, Processing, Optimisation

3<sup>rd</sup> pillar

DELPHI Validation activities through realistic pilot demonstrations



### **DELPHI Use Cases**





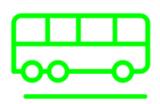
#### MADRID USE CASE

Multimodal transport for a Sustainable Last
Mile Delivery (LMD) supported by
blockchain for sharing economy in the ecommerce Channel (Spain)



#### ATTIKA USE CASE

Integrated freight and passengers' models and data sharing framework in the Attica region (Greece)



#### MYKONOS USE CASE

Integrated freight and passengers' models and data sharing framework at the island of Mykonos (Greece)



#### CLUJ-NAPOCA USE CASE

Integrated passengers' models and data sharing governance framework in the Cluj-Napoca Metropolitan Area (Romania)





# Towards DELPHI's Governance Framework

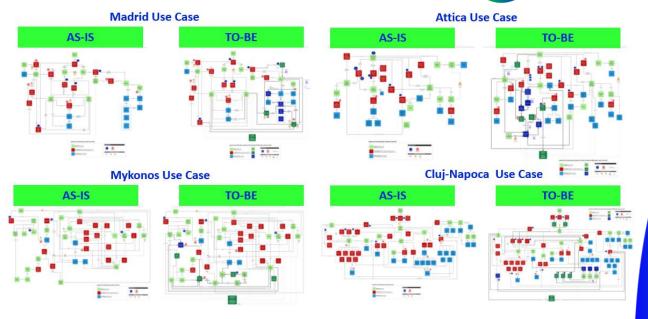
DeNIM-Gov & DELPHI town

## DELPHI's Governance Framework - Methodology



#### 1. Data collection and analysis:

Working sessions per DELPHI pilot that led to the co-creation of the AS-IS and TO-BE setups associated with each pilot



- the DELPHI WP2 Questionnaire addressed to Advisory Board members, Frontier Projects Cluster and Consortium Partners, with focus on the following critical aspects:
  - a) Multilevel Governance of Urban Mobility
  - b) Stakeholder Roles and Engagement
  - c) Policies Related to Urban Mobility for Passenger and Freight



# DELPHI Novel Integrated Mobility Governance framework (DeNIM-Gov)



#### 2. Recommendations:

The aforementioned actions resulted in the consolidation of 21 recommendations\* that constitute the backbone of **DELPHI Novel Integrated Mobility Governance framework** (**DeNIM-Gov**), including among others the following key areas:

- data interoperability
- development of a shared vision and collaborative business models
- harmonization of regulations across sectors and jurisdictions
- smart contracts and dynamic data sharing protocols

DeNIM-Gov is to be validated through the DELPHI pilot implementations and constitutes the suggested framework for DELPHI town.

<sup>\*</sup> For further information please contact DELPHI coordinator and dissemination manager at <a href="mailto:info@lists.delphi-project.eu">info@lists.delphi-project.eu</a>





# DELPHI's impact

**Expected impact** 

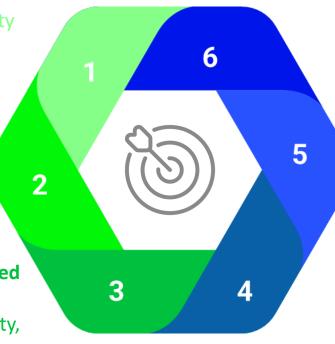
## **DELPHI's Impact**



Improved multimodal transport network and traffic management capabilities, facilitating seamless door-to door mobility for passengers and freight

Effective and resilient network-wide data exchange and new integrated data management systems for dynamic and responsive multimodal network and traffic management

Tested and validated systems for **enhanced prediction and resolution of network** bottlenecks, substantially increasing safety, security, resilience and overall performance of the entire transport network



**High market adoption** and **transferability** of innovations to different ecosystems

New governance arrangements for multimodal transport network and traffic management, in view of further regulatory and policy actions.

Innovative tools and services for optimising mobility flows of passengers and freight in cities and other operating environments, cutting congestion, journey times and traffic jams across transport modes, and thereby significantly reducing emissions (CO<sub>2</sub>, SOx, NOx, particles, noise)





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# Thank you for your attention!



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