Integrated passenger and freight transport: seamless door-to-door mobility and optimal use of resources



Margarita Kostovasili, John Kanellopoulos, Angelos Amditis I-SENSE, Institute of Communication and Computer Systems (ICCS), St. Iroon Polytechneiou 9, Zografou, 15773, Greece

Challenges hindering transportation:

- Increasing complexity of stakeholder landscape, high urbanization rates, e-commerce increase
- High fragmentation in freight/passenger transport, highly disconnected systems
- Unavailability, heterogeneity, low quality of data on urban freight and passenger transport
- High environmental impact calling for reduced energy consumption and emissions

• Proposed solutions:

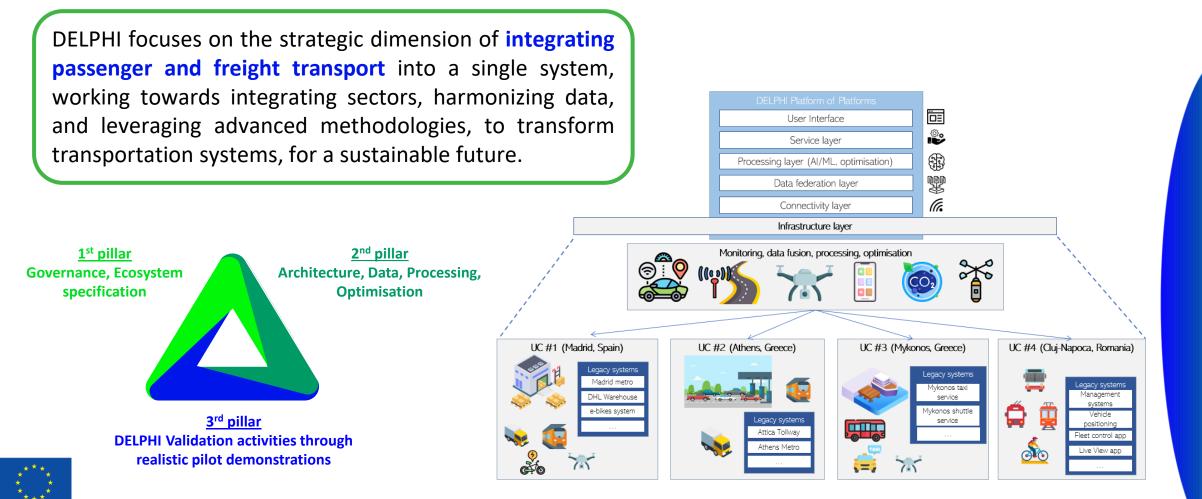
- Novel and neutral governance schemes and regulatory frameworks
- Interoperability and federation of existing/novel platforms and technology-independent services
- Harmonized data specification and reference information models, exploiting diverse data sources
- Integrated passenger and freight transport model with common approaches and methodologies



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Federated Network of Platforms for Passenger and Freight Intermobility





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Coordinated mobility for passengers & freight

- Tools & Methods:
 - Data Spaces-driven architecture for data federation
 - Novel governance/regulatory schemes
 - Ultra-efficient methodologies for traffic monitoring
 - AI-/ML-powered MNTM optimization framework
- USE CASE #3 Integrated freight and passengers' models and data sharing framework at the island of Mykonos (Greece) USE CASE #4 Integrated passengers' models and data sharing governance framework in the Cluj-Napoca Metropolitan Area (Romania) 4 pilot demonstrations in real-life settings (Spain, Greece, Romania)

- Expected Outcomes:
 - Improved decision-making/use of resources, enhanced bottleneck prediction/mobility flows
 - Reduced costs, congestion, delivery times and environmental impact
 - Increased traffic data monitoring, enhanced collaboration among transport stakeholders
 - Increased public transport performance, reduced emissions produced by PT vehicles







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Thank you for your attention!



Margarita Kostovasili, M.Eng Transport Engineer, Project Manager, ICCS margarita.kostovasili@iccs.gr



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