

Use Cases

Use Case 1

Blockchain & Digital Twins to support Decision Making Process in multimodal transport combined with a Subway-Based Network for sustainable last mile distribution (Spain).

Use Case 2

Port-to-Airport multimodal freight transport: End-to-end optimization with DSS and real-time monitoring & control capabilities (Greece).

Use Case 3

Riverport to warehouse hub via railway network – Galati Port (Romania).



Flexible, multi-mOdal & Robust FREIGHt Transport



Project Coordinator:
Dr. Georgia Ayfantopoulou



Project start: 01/09/2022
Duration: 40 Months
EC Budget: €7,151,679
Partners: 18

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The FOR-FREIGHT project has received funding from Horizon Europe, under Grant Agreement No. 101069731.



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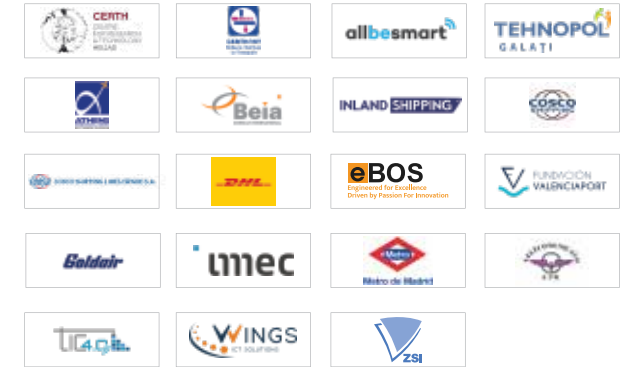
Intermodal Interface Transport Challenges

- Information Silos & Legacy Systems
- Conflicting Interests
- Regulatory Compliance
- Increased Costs
- Lack of Coordination and Integration
- Last-mile Increased Costs Connectivity
- Digitalization Gap
- Lack of Standardization

FOR-FREIGHT Innovation Aspects

- 1** Comprehensive technology-driven solvers library:
 - Responds to different Technological & infrastructure maturity.
 - Monitoring and prediction of CO₂ footprint, costs, capacities, etc.
- 2** “Community” Platform:
 - Consumes the local innovation and technology advancements of different ecosystems.
 - A unique pipeline of solvers and data sources to provide solutions to real-world operational cases.
- 3** Setting a “common ground” for logistics communication:
 - Expansion of TIC4.0's common language to hinterland actors (warehouse, dry port, airport, land transport).
- 4** Last mile distribution systems in intermodal interfaces:
 - Utilization of a Subway-Based Network as a sustainable alternative for last-mile distribution.
 - New capacities and efficient interfaces.
- 5** Cutting Edge Technology integration:
 - Digital Twins as a decision-support system and simulation tool.
 - IoT sensors for real-time tracking.
 - Blockchain technology.

Consortium



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