## AWARD 2ND FINAL CONFERENCE: Revolutionizing logistics — a European conference on Automation in logistics



Comet Meetings - Louise, Pl. Stéphanie 20, 1050 Bruxelles



13 June, 2024 09:00 AM - 17:00 PM





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006817.













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# Road automation integration in logistics nodes and multimodal operations



# **Session:** Road automation integration in logistics nodes and multimodal operations



**Giuseppe Luppino** TG2 and TG3 Programme Manager at ALICE ETP

We welcome your questions for the panel



Join at slido.com #AWARD

**Moderator** 



AWARD 2nd Final Conference 13<sup>th</sup> June 2024



Andreas Gavrielides Senior Postdoc at imec, University of Antwerp IDLab FOR FREIGHT



Ioanna Fergadiotou Head of Inlecom Innovation at INLECOM AUTOSUP

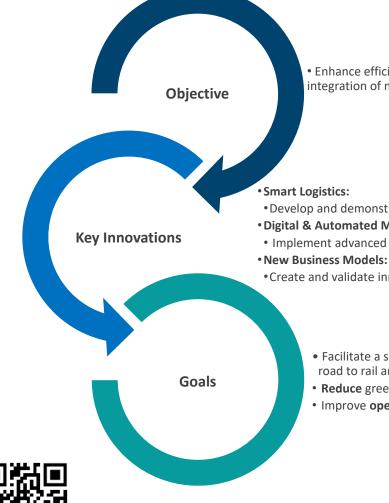


Tammo Märtens Research associate, at Fraunhofer IML MultiRELOAD

Join at

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# B MultiRELOAD



· Enhance efficiency, sustainability, and integration of multimodal freight transport.

• Develop and demonstrate innovative solutions. • Digital & Automated Multimodal Nodes: Implement advanced technology.

• Create and validate innovative approaches.

• Facilitate a significant modal shift from road to rail and inland waterways by 5%.

- Reduce greenhouse gas emissions.
- Improve operational efficiency by 20%.

### Impact of MultiRELOAD on automation in multimodal nodes



#### **Digital Twin Technology**

•A digital twin platform for ports enhances real-time data visualization, decisionmaking, and predictive maintenance, optimizing operations and reducing environmental impact.



#### **Automated Handling Processes**

•Automation of handling processes and predictive maintenance in inland terminals is demonstrated at duisport, and the ports of Vienna and Basel.



#### **Multimodal Corridor Digital Services**

• RPIS and slot booking app enhance multimodal transport efficiency by integrating inland navigation with other transport modes.





Website

Funded by the European Union

The project receives funding under the Horizon Europe Call "Safe, Resilient Transport and Smart Mobility services for passengers and goods" | Call ID: HORIZON-CL5-2021-D6-01, Grant ID: 101069796

Automation Roadmap



### Boosting innovation-led industrial transition to AUTOnomous Multimodal SUPply Chains

AUTOSUP aims to support the smooth advancement of automation levels in multimodal hubs and enhance their operation as nodes in a Physical Internet logistics network.

We focus on three key factors:

- the level of automation in operations
- the level of connectivity
- the level of collaboration

Automation requirements for seamless multimodal automatic freight transport.



Open DSS and customizable DT model of autonomous SCs, to guide the implementation and deployment of automated processes and solutions.



New operational, governance & organisational change management models that incentivise cross-mode collaboration and reduce investment costs.

Validated operational and cost efficiencies of solutions in two ports (Antwerp-Bruges & Trieste).

Strategic and cohesive alliance for the alignment of multimodal automation adoption roadmaps across rail, road, aviation, waterborne etc.



IRAAR

AUTOSUP project has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No 101147468

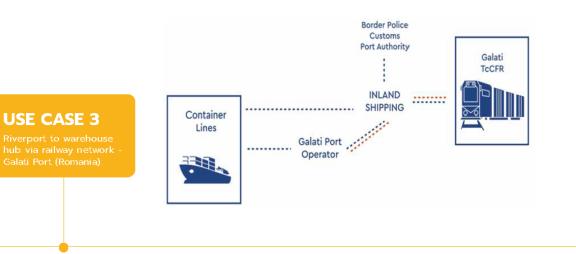
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### Flexible, multi-mOdal & Robust FREIGHt Transport

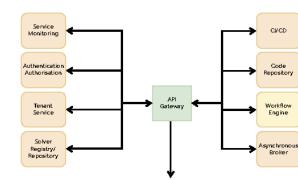
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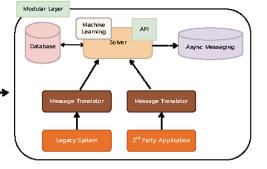
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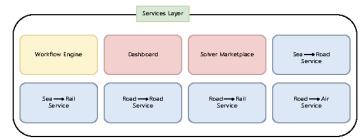
🌐 www.for-freight.eu



#### **Platform Architecture**

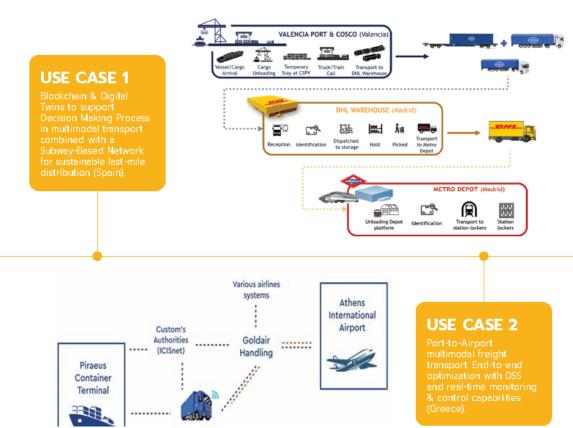






#### Concept

FOR-FREIGHT aims to maximize the utilization of multimodal freight transport capacity and reduce the average cost of freight transport through the development of novel solutions and their integration with legacy logistics systems.



### Panel discussion

We welcome your questions for the panel via SLIDO



Join at slido.com #AWARD



Andreas Gavrielides Senior Postdoc at imec, University of Antwerp IDLab FOR FREIGHT



Ioanna Fergadiotou Head of Inlecom Innovation at INLECOM AUTOSUP



Tammo Märtens Research associate, at Fraunhofer IML MultiRELOAD

### Structure of the session

You are scheduled to speak in the session 11.40-12.30 | Road automation integration in logistics nodes and multimodal operations. We propose the following <u>structure</u> for the session:

Introduction of the session and the panellists by Giuseppe Luppino	5 min
Use case presentation and/or opening statement by the panellists (please do not answer the question already here 🙂 )	10 min (+-3 minutes each)
2 questions per panellist	15 minutes (5 minutes each)
Closing of the panel, main message/lesson learned they want to share	10 minutes
Question of the audience via SLIDO	5 minutes

You can use 1 slide to visualise your opening statement and/or use case. The meeting template is enclosed to this mail. You can also propose questions you want to be asked or ask yourself to the other panellists.

AWARE

2025 august end of the sister projects Multireload and For Freigth AUTOSUP such started

- SLIDES= focus on the objectives of the projects
- Questions = more insights in the vision

### Questions

- Q1: Which are the key challenges and aspects to consider when integrating automation in logistics nodes and the logistics and intermodal logistics operations?
  - Multireload -> relevant expected results (now) in the context of automation in general
  - **AUTOSUP** -> modal shift, road is not the focus what are the **ambitions**
- Q2: What are the key relevant expected results and experiences from the projects in the context of road transport automation/integration in intermodal chains?
  - For Freigth initial version of the platform will be released in July, generalising at much as possible, but need to connect solutions to solve automation over the full value chain
    - Spanish use case: Crane (Valencia) -> warehouse Madrid -> DHL port for distribution from start to end, GHG down, try to demonstrate the end-to-end solution market place for users
    - Cranes optimise the man months of the crane operators, not the automation of the cranes itself is the goal
- Q3: How will automation in inland terminals develop over the next years?
  - **Multireload** future : roadmap on internal waterways technology+timeframe focus of the terminals is now on CRANEs, in the future it will shift to...
  - For Freigth end-to-end + market place (value creation of the full value chain)
- Q4: What can you learn/take from the other project in the new AUTOSUP project?
  - **AUTOSUP** roadmap is interesting key activity : aligning roadmaps of different modes creation of bottlenecks













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