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Alliance for Logistics Innovation through Collaboration in Europe

## **5th July 2022** European Logistics Innovation Day BOOSTLOG project's event

6th July 2022 ALICE General Assembly

Boosting impact generation from research and innovation on integrated freight transport and Logistics system

Activities performed in the frame of BOOSTLOG Project that has received funding from the European Union's Horizon 2020 research and innovation Programme under grant No 101006902

# Identified priorities for future R&I research & mapping of future calls

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Activities performed have received funding from the European Union's Horizon 2020 research and innovation Programme under grant No 101006902 and are within the framework of ALICE.



*"Define high potential contribution to EU policy objectives that need to be prioritized in future R&I actions"* 



- Develop a holistic framework for identification, assessment and consensus building around priority R&I gaps
- Collect input und feedback from project partners, ALICE members and external stakeholders





#### 1. Connected networks in a sustainable society

How do interconnected networks need to be designed to help resolve resource scarcity?

Improved transport infrastructure performance – Innovative digital tools and solutions to monitor and improve the management and operation of transport infrastructure (WP 2024)

2. Coping with the on-demand economy

How can logistics concepts help to organise the growth of e-commerce channels and mitigate its potentially increasing impact on the environment?

Zero-emission e-commerce, freight delivery and return choices by retailers, consumers and local authorities (WP 2023)

- 3. Prepare for disruption resilience and visibility to the next level How to achieve increased robustness of supply chains using multi-platform forecasting?
- 4. Modular loading units for e-commerce Which new modular loading unit design could best support increasing e-commerce flows?



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- 5. Smart integration of information systems for trade, logistics and transport What basic conditions should be met in terms of alignment of digital systems to ensure that information can be exchanged between subsystems?
  - Integrated real-time digital solutions to optimise navigation and port calls to reduce emissions from shipping (WP 2023)

*Optimising multimodal network and traffic management, harnessing data from infrastructures, mobility of passengers and freight transport (WP 2024)* 

6. Implementation of sustainability measurement schemes

How to advance the critical assessment of sustainability impact of innovations?

7. Aligned measurement of carbon emissions of digitalized logistics *How to align GHG emissions reporting of digitalized logistics chains?* 

*Topic: Future proof GHG and environmental emissions factors for accounting emissions from transport and logistics operations (2023)* 

Public procurement: . Quantification of the environmental impact and energy consumption of ICT



# Eleven recommendations are described in D4.3

- 8. Automated and autonomous operation in logistics hubs How to use automation and operational autonomy within logistics hubs to improve efficiency?
  Topic: Operational automation to support multimodal freight transport (WP 2023)
- 9. Cross-sectoral, sustainable multimodal implementations of Physical Internet solutions *How to make multimodal transport systems ready for the Physical Internet?*

Scaling up logistics innovations supporting freight transport decarbonisation in an affordable way (WP 2024)

10. Regional Logistics Decarbonization

How to radically reduce carbon emissions of regional transport flows?

11. Dealing with driver shortage How can the logistics sector respond to the driver shortages?



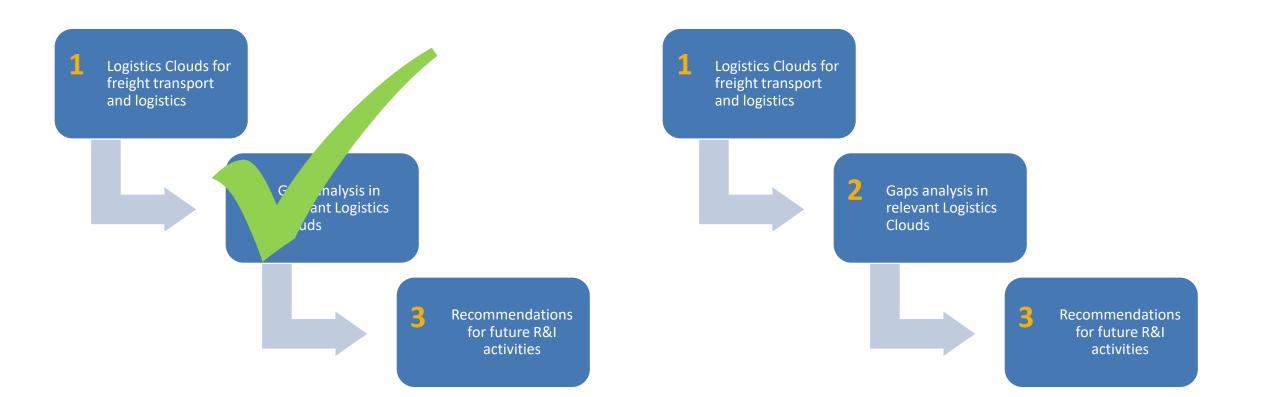
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Many topics from the upcoming Horizon Europe work programme for 2023/24 were influenced by our recommendations

# Additional relevant topics under discussion:

- Co-designed smart systems and services for user-centred shared zero-emission mobility of people and goods in urban areas (2Zero, CCAM and Cities' mission) (2023)
- EU Member States research policy cooperation network to accelerate zero-emission road mobility (2ZERO Partnership) (2023)
- Climate resilient and safe maritime ports (2023)
- New designs, shapes, functionalities of Light Commercial Vehicles (2ZERO Partnership) (2024)
- Developing small, flexible, zero-emission and automated vessels to support shifting cargo from road to sustainable Waterborne Transport (2023)
- Effects of disruptive changes on transport safety issues, creating a resilient mobility system (2023)





## 1. Iteration from M1 to M15

## 2. Iteration from M21 to M35

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# *"What gives you sleepless nights when you think about future logistics?"*

We will include all input for the second iteration of WP4 work.

