Logistiikka, kuljetukset ja jakelu Horisontti Eurooppa ohjelmassa

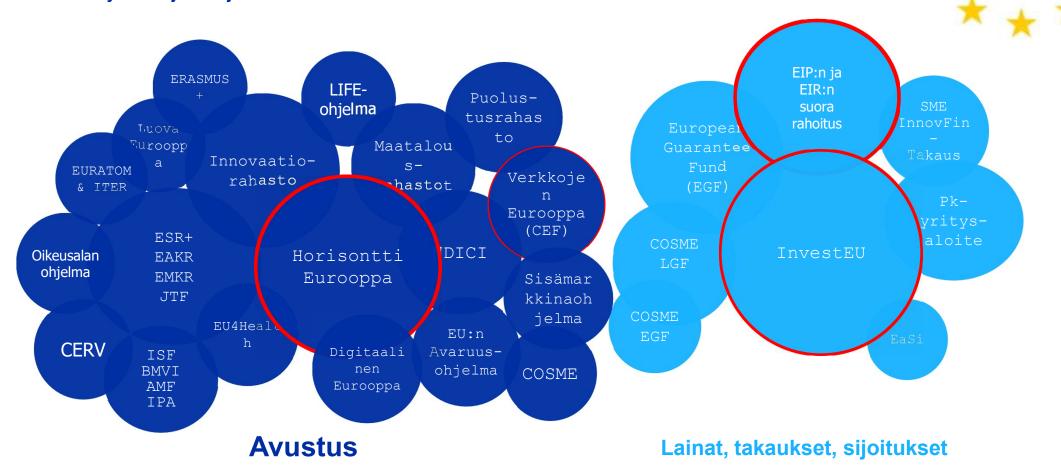
Logistiikan digitalisaatioverkosto 17.5.2022

Hanna Vuorinen



EU-RAHOITUKSEN LAAJA KENTTÄ

Yhteensä yli 30 ohjelmaa ja välinettä



EU-RAHOITUSNEUVONTA

www.eurahoitusneuvonta.fi

Horisontti Eurooppa – missä kaikkialla logistiikka näkyy?

HORIZON EUROPE

EURATOM

Fusion

Fission

SPECIFIC PROGRAMME: **EUROPEAN** DEFENCE FUND

Exclusive focus on defence research & development

> Research actions

Development actions

SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT Exclusive focus on civil applications Pillar I Pillar II Pillar III **EXCELLENT SCIENCE GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL** COMPETITIVENESS

- Health · Culture, Creativity & **Inclusive Society**
- · Civil Security for Society
- · Digital, Industry & Space
- Climate, Energy & Mobility
- · Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre

INNOVATIVE EUROPE

European Innovation Council

European Innovation Ecosystems

European Institute of Innovation & Technology*

> **Joint** Research Center

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

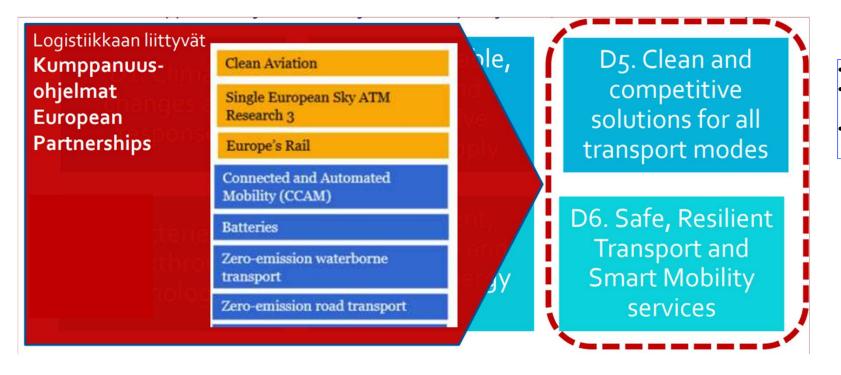
European Research Council

Marie Skłodowska-Curie

Research Infrastructures

Reforming & Enhancing the European R&I system

Klusteri 5 (Ilmasto, energia ja liikkuvuus) työohjelmat 2021-24



- Waterborne transport Zero-emission Road transport
- Aviation
- CCAM
- Multimodal and sustainable transport systems for passengers and goods

Cluster 5 contribution to REPowerEU

Buildings

• 68 M€ on energy efficient and clean energy buildings

Transport

- Road transport: 185 M€ on electric vehicles
- 65 M€ on more performant batteries for electric vehicles
- Aviation: 37 M€ on hydrogen/electric aviation
- Waterborne: 65 M€ on alternative fuels/electric powertrains
- Logistics: 45 M€ on less traffic thanks to more efficient logistics

Industry

• 36 M€ on energy savings in industry

Energy supply

- Replace natural gas with renewable gases
- Boost renewable energy sources

250M€ for activities addressing (also) hydrogen

Almost 600 M€ for more performant and cheaper renewable energy sources:

- 214 M€ for solar and wind energy
- 103 M€ for renewable fuels
- 183 M€ for other renewable solutions
- 30 M€ for renewable energy valleys
- 67 M€ for cross-cutting actions

Energy demand

 Reduce reliance on fossil fuels across multiple sectors (mainly buildings, transport, industry)

Energy system

- Increase electrification
- Integrate higher shares of renewables

- 276 M€ for making the energy system more flexible and resilient (including storage solutions and digitisation of energy system)
- 42 M€ on batteries for stationary energy storage



2ZERO

- D5-1-1. Smart, low-cost pervasive stationary slow charging and bi-directional solutions synergic with the grid for EV mass deployment (2ZERO Partnership) (2024)
 - Development of innovative optimisation functions exploiting real-time access to battery information such as state of health, state of charge, capacity and power set point, which should be provided respecting any GDPR and data disclosure terms to the owners, users or other stakeholders in the techno-economical value chain, such as building energy system managers, mobility and logistics service providers and electricity stakeholders.
- D5-1-8. Integrated flexible multipoint megawatt charging systems for electric truck mass deployment (2ZERO Partnership) (2024)
 - Opportunities for sharing and balancing power supply within studied areas and locations of logistics terminals and truck stops with nearby depots for overnight charging of trucks, buses, and construction machines, car-parking etc. should be considered.
 - Build-up logistics hubs
- D5-1-10. New designs, shapes, functionalities of Light Commercial Vehicles (2ZERO Partnership) (2024)
 - Expected outcome:
 - New and innovative LCVs concepts to address new requirements from zero emission logistics processes in cities increasing the affordability and scalability of the proposed solutions.
 - User-centric definition of requirements on vehicles, infrastructure and system from mobility operators and logistics companies considering new and innovative solutions.

Waterborne

- D5-3-12. Reducing the environmental impact from shipyards and developing a whole life cycle to measure and minimise the non-operational environmental impacts from shipping (2023)
 - Hakemuksen odotetaan vastaavan mm. "Develop and validate an environmental performance index with corresponding KPI's and determine a benchmark for shipyards through an investigation of shipyard floor processes, logistics and utilities i.e. energy use and emissions to air, water and earth, taking into account current environmental regulation, including those applicable to other land based industries which may apply to shipyards.
- D5-3-13. Developing small, flexible, zero-emission and automated vessels to support shifting cargo from road to sustainable Waterborne Transport (2023
 - Testing and demonstrating the flexible vessel concepts with emission-free propulsion systems in a relevant environment. In addition, the optimisation of the logistics chain will be assessed through logistics modelling.
 - Automated operations in multimodal logistics should be envisaged through further development and integration of single automated functions into fully autonomous systems such as; navigation and vessel command, machinery surveillance. maintenance, berthing, cargo handling, transshipment etc
 - Self-organised or remotely controlled fleet-wide coordination of operations, along with an integration of the vessels into landbased digital logistics processes.
- D5-3-14. Towards the implementation of the inland navigation action programme with a focus on Green and Connected Inland Waterway Transport (2023)
 - Expected outcomes: actions should establish a bridge towards future research, innovation and in particular buy in of deployment within inland waterways in coordination with the wider waterborne and logistics sectors.

CCAM - Cooperative Connected and Automated Mobility partnership

- D6-1-6. Orchestration of heterogeneous actors in mixed traffic within the CCAM ecosystem (2024)
 - System approach towards traffic management that integrates the operations and needs of road network users (vehicle drivers, passengers and all different kinds of VRUs,) traffic management centres and public authorities, service providers, (PT/commercial/logistics fleet managers, infrastructure industry) within the mobility ecosystem.
- D6-1-9. CCAM effects on jobs and education, plans for skills that match the CCAM development, and prerequisites for employment growth (2023)
 - Logistiikkasektori mukana

Multimodal transport, infrastructure and logistics

- D6-2-1. Optimising multimodal network and traffic management, harnessing data from infrastructures, mobility of passengers and freight transport
 - Logistics as as service
- D6-2-2. Zero-emission e-commerce, freight delivery and return choices by retailers, consumers and local authorities
 - Logistiikkaoperaattorit keskiössä, ml. koordinaatiotoimenpiteitä
- D6-2-3. Operational automation to support multimodal freight transport ESIMERKKI
 - Linkki kaikkiin liikennemuotokohtaisiin t&i-kumppanuuksiin
 - Strategies to reduce the investment cost in this sector and support the implementation of automated solutions for logistics and multimodal freight transport are proposed.
 - · Recommendations for possible regulatory and policy actions
- D6-2-4. Scaling up logistics innovations supporting freight transport decarbonisation in an affordable way
 - Logistiikkasolmukohdat ja logistiikkakonseptit, jotka nopeuttavat tavaraliikenteen hiilineutraalisuutta sekä nollapäästöisten ajoneuvojen/alusten ja multimodaalisuuden käyttöönottoa.
- D6-2-5. Future proof GHG and environmental emissions factors for accounting emissions from transport and logistics operations
 - Proposals should develop a comprehensive set of harmonised emission factors for the transport sector (freight and passenger), covering GHG emissions (CO2 equivalent) of transport and logistics operations. The proposals should address values for the entire transport/logistics chain and take up the full energy lifecycle (Well-To-Wheel/Wake).
- D6-2-7. Improved transport infrastructure performance Innovative digital tools and solutions to monitor and improve the management and operation of transport infrastructure
 - Building on the common European mobility data space and the Digital Transport and Logistics Forum (DTLF), facilitate the seamless use and provision of data and information to the end user across the transport infrastructure network and logistic chain, with a view to progress advancing towards smart mobility concepts for passengers and freight.

Vielä ehdit – logistiikkahaut 2022, DL 6. syyskuuta



o1 Freight transport and logistics chain for operational connectivity and climate neutrality, pilot actions (2 IA-hanketta verkostopilotteina à 8 M€)



o2 Digitalisation of urban freight for climate neutrality, optimised, shared, space management (2 IA-hanketta à 8 M€)



o3 Enforcement for sustainable efficient transport operations, digital information exchange, human factor (2 RIA-hanketta à 4 M€)



o5 Network and traffic management system for doorto-door mobility and freight transport (4 RIA-hanketta à 4 M€)



o7 New concepts for resilient freight transport and logistivcs networks against disruption (2 RIA-hanketta à 4 M€)

Horisontti Eurooppa –ohjelman kansallinen yhteystoimisto EUTI asiantuntijoineen auttaa www.horisonttieurooppa.fi ja laajemmin www.eurahoitusneuvonta.fi

Kiitos!

lvm.fi Twitter: @lvmfi

