



#InvestEUresearch

#H2020TransportInfo

Horizon 2020 Work Programme for Research & Innovation 2018-2020

Logistics Info Day 14 December 2017



Research and
Innovation

LC-MG-1.2-2018
(RIA)



Sustainable multi-modal inter-urban transport, mobility and spatial planning in large metropolitan regions

Challenge:

New forms of transport & mobility could revolutionise demand with major consequences for the spatial organization of metropolitan areas or "**commuter belts**" (*regions consisting of a dense populated urban core and its less-populated surrounding territories sharing industry, infrastructure and housing*). Mitigating negative impacts of transport can and must be pursued.



LC-MG-1.2-2018
(RIA)



Sustainable multi-modal inter-urban transport, mobility and spatial planning in large metropolitan regions

Scope:

Address impacts of planning in large metropolitan regions; identification of new forms of mobility impacting on spatial **redesign of urban and low-density areas**; use of geolocalization for **cooperative mobility** to foster more efficient use of infrastructure; suggest measure for the lowest carbon level in consideration of **interdependencies between spatial planning and production/consumption patterns**; comprehensive planning of the functional area extending the SUMP concept to the metropolitan region; development of sustainable policies with proven environmental impact.



European
Commission

LC-MG-1.2-2018
(RIA)



Sustainable multi-modal inter-urban transport, mobility and spatial planning in large metropolitan regions

Expected impact:

Aid decision makers to anticipate and plan spatial adaptation and redesign to take full advantage of new forms of mobility; balanced development between urban and rural areas; reduced congestion, energy, emissions, noise and land-use; increased coordination between mobility and economic development; increased inter-mobility and higher resilience of the transport system.

Estimated EC contribution per proposal: 5 to 8 Million Euros

InCo-related: Encouraged – Twinning with US DoT funded projects to be envisaged

LC-MG-2.6-2019
(RIA)



Moving Freight by Water: Sustainable Infrastructure and Innovative Vessels

Challenge:

Overcome the under-utilization of water transport and its low integration in the multimodal transport system. Need to stimulate the modernization of intra-European waterborne transport fostering automation and digitisation so as to enable its more efficient and reliable participation in the whole supply chain, to reduce environmental impact and to respond to changing freight flows and support full implementation of synchromodality within inland waterways.

LC-MG-2.6-2019
(RIA)



Moving Freight by Water: Sustainable Infrastructure and Innovative Vessels

Scope:

Proposals should focus on a) inland waterways or b) maritime transport.

- TRL5 water transport solutions incorporating **innovative vessels** and limited and **affordable improvements of existing infrastructure**; cost effective feeding of freight from large to small inland ports to contribute innovative solutions for last mile delivery.
- Increase efficiency of **inland waterways/port infrastructure**: automation of bridges, locks and dams, cargo handling, docking systems and shore-side power.
- **Inland waterways** maintenance and operation to increase network resilience; long-term reliable navigability forecast.
- Improve environmental performance. Address the entire **business model**, cost-benefit analysis of proposed concepts and recommendation to optimise full intermodal solutions.

Development level for potential deployment with **financial support of CEF, EIB, ESIF, etc.**

LC-MG-2.6-2019
(RIA)

Moving Freight by Water: Sustainable Infrastructure and Innovative Vessels

Expected impact:

Decongest road and city infrastructure; reduce the CO2 and air pollutant emissions of freight transport; enhance the performance of the TEN-T network. Modernise and increase the reliability and competitiveness of intra-European Water transport.

Estimated EC contribution per proposal: 5 to 10 Million Euros

LC-MG-2.9-2019

(RIA)

Inco Flagship



Integrated multimodal, low-emission freight transport systems and logistics

Challenge:

Global, regional and local freight transport massive changes due to technology advancement and major socio-economic changes; new logistics concepts (Physical Internet) and disruptive technologies (Blockchain, Industry 4.0, automation) and new business models impact global freight transport need to be better understood and assessed.

New trade routes impact traditional pattern of freight movement and will need new connections with European network.

International cooperation is fundamental to integrate also countries in special situations into the world economic landscape.

LC-MG-2.9-2019

(RIA)

Inco Flagship



Integrated multimodal, low-emission freight transport systems and logistics

Scope:

Understand how **new concepts in logistics** have an impact on global freight transport and on related greenhouse gas emissions;

Speed up the process and transition towards the **Physical Internet**;

Research the range of new issues and questions emerging with the **new trade routes** to and from Europe;

Understand new **disruptive trends** emerging as on-demand logistic solutions potentially logistics game-changers;

Assess the impact of **emerging technologies**: Blockchain, Industry 4.0, 5G, 3D printing, Unmanned vehicles....

Best case models, decision support systems, governance, privacy, cybersecurity

LC-MG-2.9-2019

(RIA)

Inco Flagship



Integrated multimodal, low-emission freight transport systems and logistics

Expected impact:

Improved integration of the European transport network in the global trade network; better understanding of the impact of emerging technologies on freight flow and guidelines for optimisation of vehicle, infrastructure and operation; facilitate the development of disadvantaged regions and their inclusion into the international trading system.

Estimated EC contribution per proposal: **3 to 7 Million €**

InCo-related:

International Cooperation encouraged in particular with US, Japan, Canada, China, Latin America.