



The EU Framework Programme for Research and Innovation

**HORIZON 2020**

**Information day on  
Logistics open calls**  
Brussels, 13 October 2016



- The aim of the topics in this session is to increase efficiency and hence sustainability of logistics systems, use opportunities provided by digitalisation, remove the communication bottlenecks between the different stakeholders and thereby improve the potential for collaboration
- Two topics:
  - ✓ **MG-5.2-2017**: Innovative ICT solutions for future logistics operations
  - ✓ **MG-5.4-2017**: Potential of the Physical Internet (PI)
- Budget:
  - ✓ MG-5.2/5.3-2017 RIA = **12 M€**
  - ✓ MG-5.4-2017 CSA = **1M€**



# **(1) Topic MG-5.2-2017**

## **Innovative ICT solutions for future logistics operations**

- **Challenge:** to exploit opportunities offered by advanced ITC (eg. Internet of Things, Big data) by focusing on:
  - ✓ Electronic booking and planning systems towards a paperless environment and freight traceability
  - ✓ Real-time exception management and business models for dynamic transport services
  - ✓ Interoperability & integration of SMEs in supply chain
- **Expected Impact:**
  - ✓ Link digital & physical flows; seamless freight transport execution; increased reliability; optimisation of load factors & delivery routes; business models for collaborative & dynamic services



## (2) Topic MG-5.4-2017

# Potential of the Physical Internet (PI)

The creation of the PI requires integration of many innovative concepts and a mental-shift towards a different governance structure

Two types of actions:

- ✓ RIA-case study to identify minimum requirements for efficient influence of PI's nodes; modelling of tools & business models
- ✓ CSA – mapping of relevant activities, advocacy & dissemination
- **Expected Impact:** get industry-wide support & launch the development of the PI
- **International Cooperation** (in particular US, Canada and Hong Kong) encouraged

## **(3) Topic MG-4.3-2017**

# **Innovative approaches for integrating urban nodes in the TEN-T core network corridors**

- **Challenge:** the efficient and effective integration of urban nodes into TEN-T corridors requires further research and innovation efforts for the development and related recommendations for deployment of innovative solutions in urban areas
- **Expected Impact:**
  - ✓ CSA produces recommendations for wide-scale deployment of research and innovation solutions in some (if justified, a selection could be made) or all urban nodes along the TEN-T corridors

- Objective of this area is to find solutions to increase the productivity, robustness & efficiency of infrastructure for all modes, and ensure the resilience of the whole transport system in case of extreme events and allow optimal use & management of the multimodal transport infrastructure,
- Three Topics:
  - ✓ **MG-7.1-2017:** Resilience to extreme (natural and man-made) events
  - ✓ **MG-7.2-2017:** Optimization of transport infrastructure including terminals
  - ✓ **MG-7.3-2017:** The Port of the Future
- Budget:
  - ✓ MG-7.1/7.2/7.3-2017 RIA= **37,5M€**
  - ✓ MG-7.3-2017 CSA = **1,2M€**



## **(2) Topic MG-7.2-2017**

# **Optimisation of transport infrastructure including terminals**

- **Challenge:** Towards zero intrusion construction, inspection & maintenance
  - ✓ Innovative design and construction methods for low-maintenance and high adaptability to future needs
  - ✓ Assessment of multimodal network capacity
  - ✓ Attention to accessibility & interoperability of corridors, terminals and hubs (including airports and inland waterways)
- **Expected Impact:** more optimal use of existing network with avoidance of over dimensioning whilst increasing capacity. Better accessibility & operational efficiency of multimodal hubs
- **International Cooperation** in particular with Neighbouring Countries encouraged



## **(3) Topic MG-7.3-2017**

# **The Port of the Future**

- **Challenge:**
  - ✓ Ensure that efficient operations will not affect negatively the surrounding territory, including city-port relations and the smart urban development of Port Cities
  - ✓ New Port concepts, new management models, and innovative design, engineering, construction and operation technologies and solutions for full customer, stakeholder and citizen satisfaction.
- **Expected Impact:** reduction of environmental impact of port activities, their operational and infrastructural costs; improvement of logistics efficiency and better integration of the port in the surrounding socio-economic area, including city-port relations and the smart urban development of Port Cities,
- **International Cooperation** (in particular with Med and other Neighbouring Partner Countries) encouraged

# **(1) Topic MG-4.1-2017**

## **Increasing the take-up & scale of innovative solutions to achieve sustainable mobility**

- **Challenge:** to increase the take-up of innovative solutions by transferring them to new contexts and studying & comparing impacts
- **Expected Impact:**
  - ✓ Actions should demonstrate/ successfully transfer a single solution/approach or limited package of mutually reinforcing solutions/approaches from a small number of locations in Europe (not more than 5) to at least 10 new locations in Europe