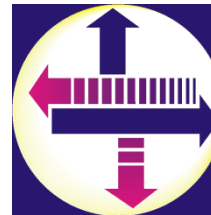


Centre for Research and Technology Hellas
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CERTH
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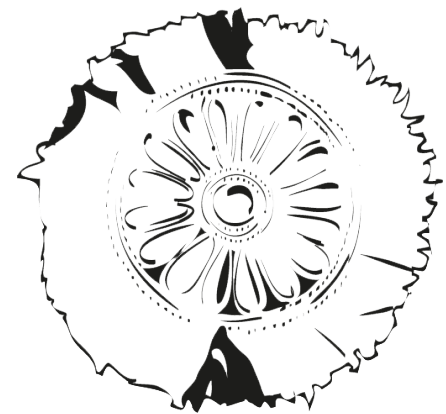
**HELLENIC INSTITUTE
OF TRANSPORT**
CERTH / HIT

Centre for Research and Technology-Hellas (CERTH) is one of the leading research centres in Greece and listed among the TOP-20 E.U. research institutions with the highest participation in competitive research grants.

CERTH includes five institutes :

- Chemical Process & Energy Resources Institute (CPERI)
- Information Technologies Institute (ITI)
- **Hellenic Institute of Transport (HIT)**
- Institute of Applied Biosciences (INAB)
- Bio-economy and Agro-technology Institute (IBO)

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Hellenic Institute of Transport (HIT)



HIT's main objective is the **conduct and support of applied research activities in the field of transportation in Greece.**

www.hit.certh.gr

Research Interests:

- ✓ Transport Policy
- ✓ Transport planning
- ✓ Operation and management of public passenger transport systems
- ✓ Operation and management of freight transport and logistics systems
- ✓ Passenger information systems
- ✓ Operation and management of maritime transport systems and ports
- ✓ Driver assistance systems for safety and environmental driving.
- ✓ Applications of Intelligent Transport Systems
- ✓ Road safety
- ✓ Urban mobility for people with special needs
- ✓ Evaluation of environmental vehicles and fuels
- ✓ Educational systems in Transport
- ✓ Systems for 'intelligent' vehicles and 'intelligent' roads.
- ✓ Mobile Phone Application Development



Hellenic Institute of Transport (HIT) Labs



HIT consists of three vertical Units (LABs) which run all research projects and a series of “horizontal sectors” or “offices”. The three main Units (LABS) are:

- **Unit(LAB) A:** Vehicle - Safety - Accessibility
- **Unit(LAB) B:** Smart sustainable Mobility - Freight Transport – Networks
- **Unit(LAB) C:** Transport Economics - Environment - Non-land Transport

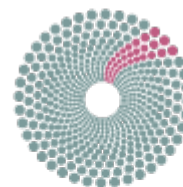
CERTH/HIT UNIT (LAB) B' objective includes all issues concerning the design, study, management and operation of the infrastructure – traffic system. Its main tasks also include transport “demand” and evaluation of the transportation system as a whole but as a sub-system as well (i.e. per transport mode).

The Lab employs:

- ✓ **3 elected research staff** (Researchers at Grades A and B),
- ✓ **7 management and technical scientists on fixed-term contracts.**

Additionally, from the beginning of 2010 **16 external scientists or experts** have been employed on a project contract basis.

HIT Lab-B highlighted projects



Detailed information about CERTH/HIT active and completed projects is available at:

<http://www.imet.gr/Default.aspx?tabid=73&language=en-US>

HIT Lab-B: Smart sustainable Mobility - Freight Transport - Networks



Research activities :

- ✓ Application of ICT and **ITS** (including **cooperative and autonomous driving**)
- ✓ Sustainable mobility and **sustainable mobility** planning
- ✓ Development and promotion of the **transportation planning** at national and regional level
- ✓ Demand forecasting and demand management (for all modes)
- ✓ Capacity and availability assessment of transport infrastructures
- ✓ **Modeling**, algorithms development for the **simulation** or mathematical representation of transport operations
- ✓ Collection, maintenance, and management of traffic and other **data** in road, rail, maritime, and air transport
- ✓ Development and maintenance of the Greek **transport observatory**
- ✓ Intelligent, **intermodal freight transport** and logistics with all modes: road, rail, maritime, air
- ✓ Organizational and operational issues of land transportation systems
- ✓ **Transport Policy** formulation covering all areas and modes of transport
- ✓ **Evaluation** of the operation of the transport system, as a whole as well as subsystems, via appropriate indicators (KPIs)

H2020 Work Programme 2018-2020

Our Interest



Smart, green and integrated transport

Mobility for Growth

- **LC-MG-1-2-2018:** Sustainable multi-modal inter-urban transport, regional mobility and spatial planning
- **LC-MG-1-3-2018:** Harnessing and understanding the impacts of changes in urban mobility on policy making by city-led innovation for sustainable urban mobility
- **LC-MG-1-10-2019:** Logistics solutions that deal with requirements of the 'on demand economy' and for shared-connected and low-emission logistics operations

- **MG-2-4-2018:** Coordinating national efforts in modernizing transport infrastructure and provide innovative mobility services
- **MG-2-6-2019:** Moving freight by Water: Sustainable Infrastructure and Innovative Vessels
- **MG-2-7-2019:** Safety in an evolving road mobility environment
- **MG-2-8-2019:** Innovative applications of drones for ensuring safety in transport
- **MG-2-9-2019:** Integrated multimodal, low-emission freight transport systems and logistics (Inco Flagship)
- **MG-3-3-2018:** "Driver" behaviour and acceptance of connected, cooperative and automated transport

- **MG-4-1-2018:** New regulatory frameworks to enable effective deployment of emerging technologies and business/operating models for all transport modes
- **MG-4-2-2018:** Building Open Science platforms in transport research
- **MG-4-3-2018:** Demographic change and participation of women in transport
- **MG-4-5-2019:** An inclusive digitally interconnected transport system meeting citizens' needs

H2020 Work Programme 2018-2020

Our Interest



Smart, green and integrated transport

Green Vehicles

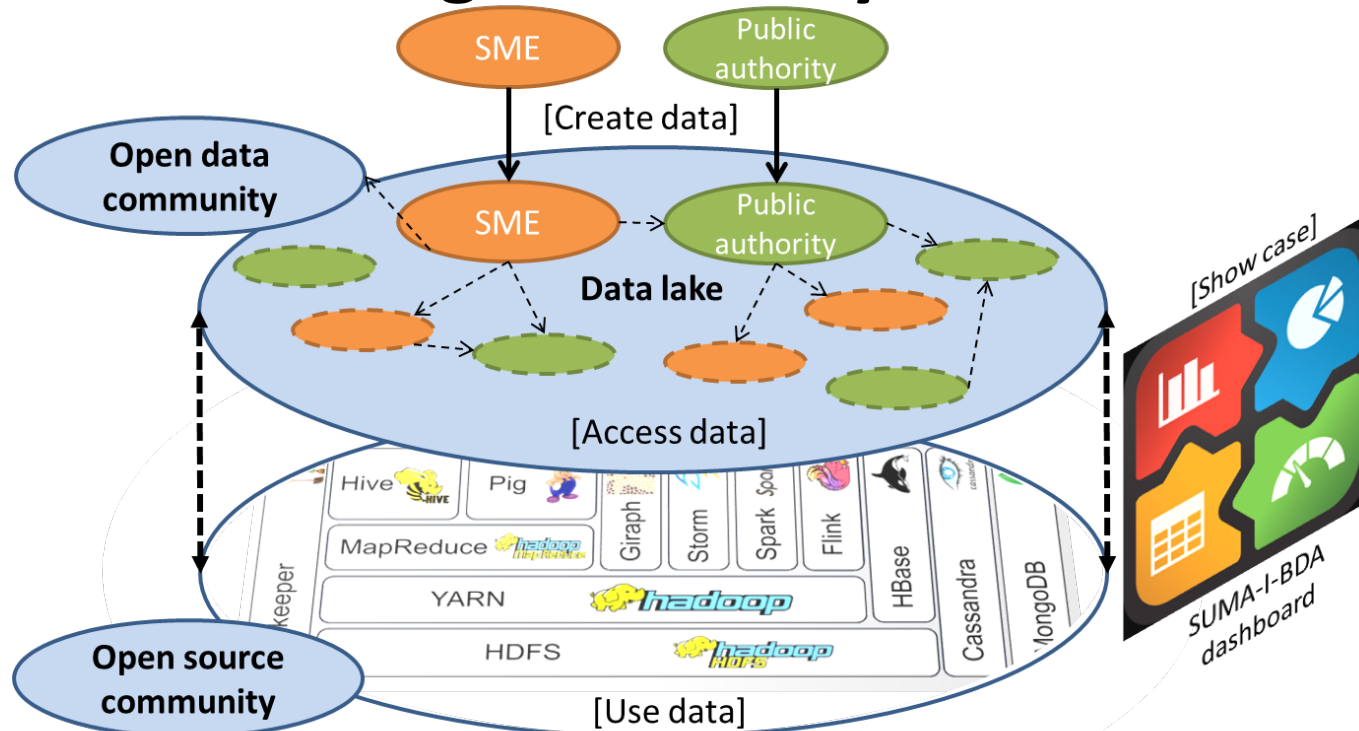
- **LC-GV-03-2019:** User centric charging infrastructure
- **LC-GV-05-2019:** InCo flagship on “Urban mobility and sustainable electrification in large urban areas in developing and emerging economies”
- **LC-GV-09-2020:** Next generation electrified vehicles for urban use

Automated Road Transport

- **DT-ART-01-2018:** Testing, validation and certification procedures for highly automated driving functions under various traffic scenarios based on pilot test data
- **DT-ART-02-2018:** Support for networking activities and impact assessment for road automation
- **DT-ART-03-2019:** Human centred design for the new driver role in highly automated vehicles
- **DT-ART-04-2019:** Developing and testing shared, connected and cooperative automated vehicle fleets in urban areas for the mobility of all
- **DT-ART-05-2020:** Efficient and safe connected and automated heavy-duty vehicles in real logistics operations
- **DT-ART-06-2020:** Large-scale, cross-border demonstration of highly automated driving functions for passenger cars

Proposal idea

Smarter Use of Mobility Assets through Innovative Big Data Analytics



MG-4-2-2018: Building Open Science platforms in transport research

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Recommendations

- The presentation **has to** last up to **4 minutes (maximum)**
- Do not overload your slides
- Provide weblinks to additional material
- Slides should be in English
- Do not use videos etc. – they might be not supported by the Infoday IT system
- Send your presentations in PDF format to: CoF@turkeyinh2020.eu until **23 September 2016.**