

Centre for Research & Technology Hellas (CERTH)- Hellenic Institute of Transport (HIT)

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Centre for Research & Technology Hellas

At a glance

OASCONF /26

CERTH Institutes

Information Technologies
Institute



Chemical Process
Engineering Research
Institute



No1 in the top list of
research organizations in
terms of EU Funding in
Greece

No 11 in EU



The **Centre for Research and Technology-Hellas (CERTH)** founded in 2000 is one of the leading research centres in Greece and listed among the TOP-20 E.U. institutions with the highest participation in competitive research grants.

Hellenic Institute of
Transport



Institute of
Applied
Biosciences



Institute for Bio-Economy and



EKETA
ΕΘΝΙΚΟ ΚΕΝΤΡΟ
ΕΡΕΥΝΑΣ & ΤΕΧΝΟΛΟΓΙΚΗΣ
ΑΝΑΤΥΞΗΣ

The Hellenic Institute of Transport

The Hellenic Institute of Transport-HIT , established in 2000, is part of the greater team of Centre for Research and Technology-Hellas (CERTH).

- I. Highly recognized transport research body at European and global level
- II. High participation in National and European applied research programs.
- III. The largest transport research body in the Balkans with 85 staff, around 40 active programs each year, modern research equipment and technological test beds mobility 4.0 / logistics 4.0.

Our Institute consists of 4+1 sectors



Vehicle -Human
Factors -Vehicles



Infrastructure-Networks
Mobility& Logistics



Transport
Economics&
Environment
-Non-Land Transport



Transport &
Tourism



Horizontal
Activities

The Hellenic Institute of Transport

Participation in **organizations and networks**:



Coordinator of
Smart Mobility
& Logistics
Solutions cluster



Core Member of EIT
Urban Mobility
and Scientific
coordinator of EIT
Urban Mobility RIS
HUB Greece



thessaloniki
smart mobility
living lab

Thessaloniki
Smart Mobility
Living Lab's
leader



Efficient member
of European
Network of Living
Labs and Leader
of Mobility and
Transition WGs



Member of
ELTIS Sustainable
Urban Mobility
Editorial Board



Member of
ALICE-
Alliance for
Logistics Innovation
through
collaboration in
Europe



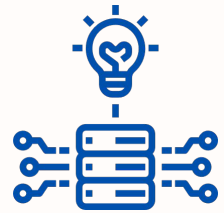
Member of
UITP
international
association for
public transport

HIT: imet.gr
Lab: smartmlab.imet.gr/
Dashboard: thessmd.imet.gr/
Open data portal: opendata.imet.gr/



Thessaloniki Smart Mobility Living Lab

The pillars



From data 2 knowledge

Simulation environments
Digital content aggregator
Data spaces
Solutions incubator



Social innovation

Citizens empowering for cross sectorial challenges
Openness
Cross-collaboration
Speed up urban transitioning



Living Lab infrastructure for transition acceleration



Thessaloniki Mobility Living Lab is one example of the open innovation 2.0 ecosystem development (beyond traditional test beds that have usually been technology driven).

Since its start, the Living Lab has evolved from a space where technological innovations are tested directly by users to an innovation eco-system.

thessaloniki
smart mobility
living lab



Open Innovation Communities ecosystem enabler

European
Network of
Living Labs

www.smartmlab.imet.gr
www.opendata.imet.gr

Dedicated resources

Competence center
Decision theater
Physical Testbeds



14byDESIGN
Competence center



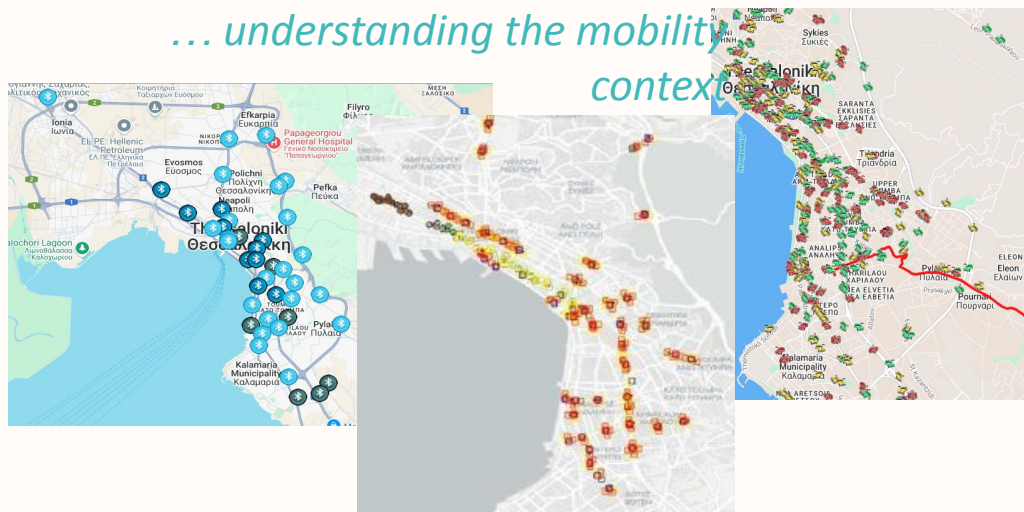
Facilitating innovation

Improve region Innovation readiness
Stimulate collaboration in innovation
Clusters & Regional hubs
Manage the complexity
Digital twins OR, AI and BD toolboxes

Value creation for the ecosystem

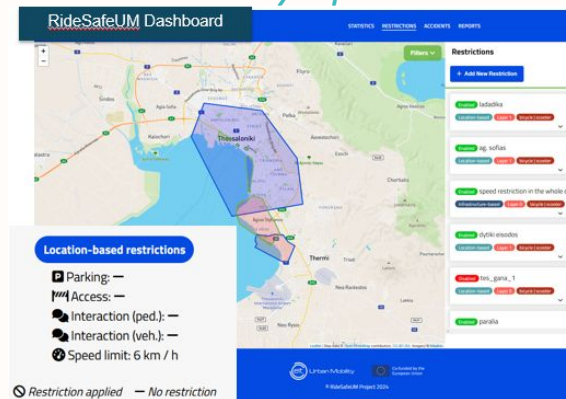
Value for research ...

... understanding the mobility context

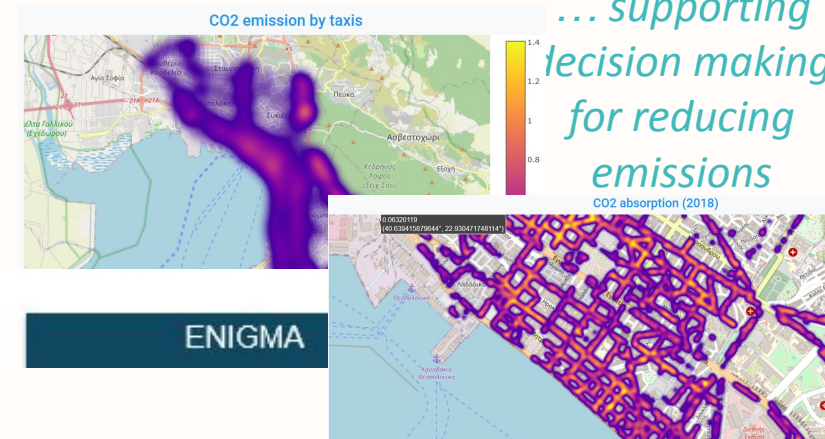


Value for municipalities & policy makers...

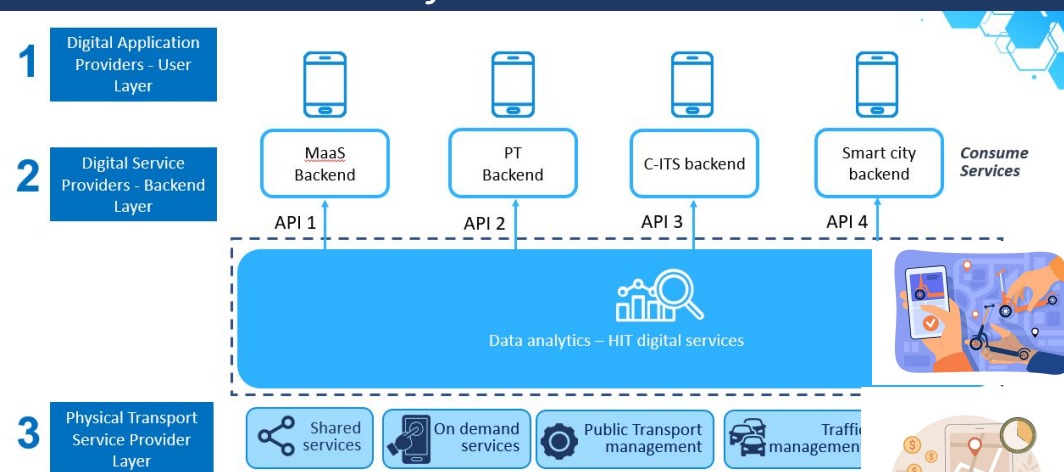
... "defining" rules for shared micro-mobility operators



... supporting decision making for reducing emissions



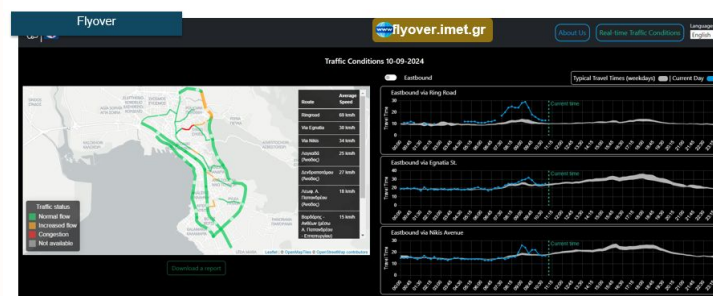
Value for businesses...



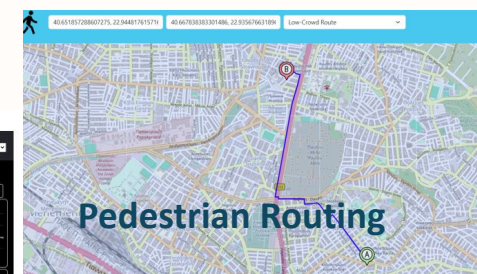
... supporting through the 1st Cluster in Smart Mobility and Logistics Sector

Value for citizens...

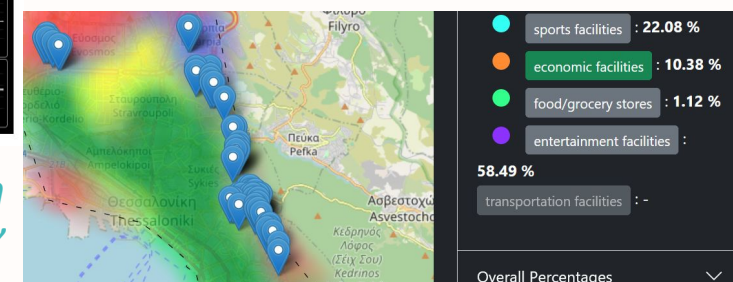
... providing real time traffic conditions



... making the 15 min city a "reality"



... facilitating the active mobility



Thessaloniki Smart Mobility Living Lab

Impact in numbers

01

Sensing the city

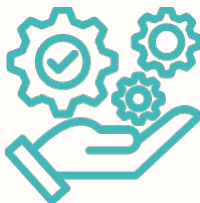
- 10+** real time data sources
- 20+** open datasets
- 25+** data sources including mobility & energy domains
- 40+** BT detectors
- 100+** traffic counters & traffic lights
- 240+** bus lines
- 1.500+** vehicles providing traffic information
- 3.000+** city assets mapped
- 17.000+** locals & places to collect activity patterns data



03

Services for citizens, government & companies

- 5+** services for public authorities
- 9+** mobility services for citizens
- 15+** knowhow transfer projects with companies
- 200+** routes with travel time provision
- 2.700+** road segments with speed provision
- 3.600+** bus stops with ETA provision



02

Engaging the local eco-system

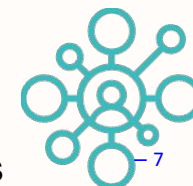
- 30+** mobility eco-system members
- 35+** companies in the cluster for mobility & logistics



04

Reach & impact

- 50+** pilots implemented in the city
- 70+** projects supported by the living lab infrastructure
- 300+** citizens actively engaged
- 500+** daily users accessing our services
- 13.000+** monthly users accessing our services



European Network of LLs-ENoLL

ENoLL is the world's largest network of Living Labs - open innovation ecosystems that build trust and tackle wicked problems through co-creation, collaboration, and experimentation.

European
Network of
Living Labs

CERTH/HIT is leading:

- ✓ ENoLL Mobility Working Group
- ✓ ENoLL Transition Super Living Lab WG

Join us at <https://enoll.org/our-network/#working-groups>



ENoLL Mobility WG



Launch: late 2020



WG Leader: CERTH-HIT, JRC and Austriatech



Purpose: To transfer knowledge and create added value for Mobility LLs about policy frameworks, harmonization, scalability & sustainability & to create a common understanding about Mobility LLs for organizing focused discussions & cross-living lab activities.

Main objectives:

- **To develop** shared terminology and definitions for common understanding within the living lab context.
- **To facilitate** regular knowledge-sharing sessions to exchange insights, best practices, and experiences.
- **To define** and test a collaboration framework that allows experimentation with effective working models.
- **To formalize** partnerships and agreements that strengthen collaborative efforts within the group.

ENoLL Transition SLL WG TASC^{/26}CONF



Launch: September 2024



WG Leader: Georgia Aifadopoulou (CERTH/HIT)



Purpose: To demonstrate the role of the Living Labs as transition accelerators that bridge bottom up and top-down policies and enable collaborative and cross sectorial innovation and synergies

Main Objectives:

WHY ? Define how Transition Living labs can support systemic changes required for climate neutrality

WHAT ? Validate with the ENoLL ecosystems the mission **and the role of the Transition Living Lab**

HOW ? Create knowledge, conclude methods & tools for creating cross sectorial collaboration & accelerate transitions through innovation and digitization

WHO? Suggest governance, policy and best practices for achieving paradigm shift at regional level through transition LL

Projects related to sustainable urban mobility

MOMENTUM



CITY OF
THESSALONIKI



Funded by the
European
Union

Modelling Emerging Transport Solutions for Urban

Mobility

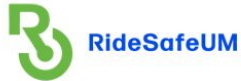
The goal of **MOMENTUM** is to develop a set of new data analysis methods, transport models and planning support tools to capture the impact of these new transport options on the urban mobility ecosystem, in order to **support cities in the task of designing the right policy mix to exploit the full potential of these emerging mobility solutions.**



WITH SUPPORT FROM
Google.org



Mobilair focus on climate justice in the city of Thessaloniki and considers Air Quality Management and Sustainable Urban Mobility. MOBILAIR evaluates potential user-centric, data-driven Air Quality management measures, aiming to **influence travelers' behavior towards environmentally friendly Urban Mobility choices.**



Co-funded by the
European Union



RideSafeUM improves safety conditions for micromobility riders (and pedestrians) and increase ridership of these modes, contributing to achieving sustainable mobility systems in cities.



Unleashing the potential of PT in Europe



Funded by the
European
Union

UPPER aims to spearhead a **public transport revolution** that will strengthen its role as the cornerstone of sustainable mobility and innovation in cities, **ultimately leading the transition towards a future of zero-emission mobility.**

JULIA



Joint developments for Urban resilience connecting users to public transport through spAce technology

Fosters the uptake of EU Space services and data in the long lead public transport market at the global scale, raising awareness among key decision makers (PTAs, PTOs, cities) on that EGNSS pays off -both from technical and economic perspectives-, ultimately unlocking significant, measurable, and durable impact.



*Environmental digital Twin
for smart cities*



Greece 2.0
NATIONAL RECOVERY AND RESILIENCE PLAN

Funded by the
European Union
NextGenerationEU



The **EnviTwin** project aims to create a high-resolution environmental digital twin to model and analyze urban heat islands (UHI) and urban pollution islands (UPI) in smart cities.



*COdesign urban REalm & dynamic Spaces
management for cognitive & socially connected*



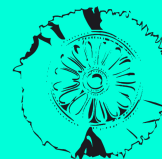
Funded by the
European
Union

CORESpaces rethinks spaces and public realm by developing & deploying flexibly adjusted, transferable tools tested in 9 cities across 9 European countries.

Thank You

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CERTH
CENTRE
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HELLAS

