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Interreg Europe

European Union
European Regional
Development Fund

Integrated REgional Action Plan For Innovative, Sustainable and LOw CaRbon Mobility

Good practice:

Development of a Mobility Monitoring Centre (MMC) for Thessaloniki

The MMC of Thessaloniki objective

The Mobility Monitoring Centre of Thessaloniki **collects, analyzes and disseminates mobility related data for the city of Thessaloniki.**

Its implementation started in 2010 under the coordination of RCM and it is continuously being updated integrating new data sources and developing more services. The currently existing services of MMS includes:

- ***Monitor the operation of the transport system of the city***
- **Support planning and decision making**
- **Provide mobility information to the interested parties and the general public**
- **Promote sustainable mobility, and as a result, improve quality of life in the region**

The MMC of Thessaloniki background

Set up of cooperation agreements

Stakeholders in the field of mobility have agreed to work in close collaboration and to support the MMC of the city by providing data and developing the necessary interfaces.

- ✓ **The Region of Central Macedonia authority**
- ✓ **Centre for Research and Technology Hellas**
  Hellenic Institute of Transport
- ✓ **The Municipalities of Metropolitan Area of Thessaloniki**
- ✓ **Thessaloniki's Public Transport Authority**
- ✓ **The local taxi association**

The MMC of Thessaloniki background

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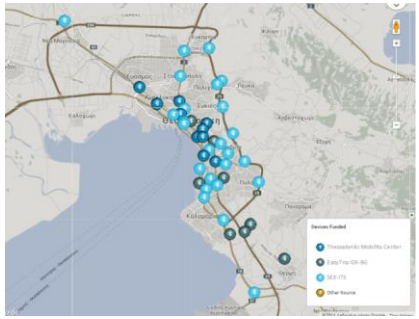
RCM is responsible for the city traffic lights operation, and undertook the responsibility to maintain and expand the ITS equipment in order to achieve a real time monitoring of the base network traffic conditions.

ITS infrastructure development

In the framework of a number of European, transnational and national projects, the transport systems of the initial MMC have been (and are being) equipped with new **ITS infrastructure** composed of

- ✓ traffic sensors
- ✓ G5 ITS stations
- ✓ VMS
- ✓ smart traffic lights
- ✓ GPS equipped vehicles
- ✓ Bluetooth detectors



RCM is currently under the procedure of upgrading, maintain and expand the existing ITS infrastructure using ROP funds.

eea grants norway grants
iceland liechtenstein norway

ΣΥΣΤΗΜΑ
ΔΙΑΧΕΙΡΙΣΗΣ
ΑΣΤΙΚΗΣ
ΚΙΝΗΤΙΚΟΤΗΤΑΣ
URBAN MOBILITY MANAGEMENT SYSTEM

HORIZON 2020

Development and operation

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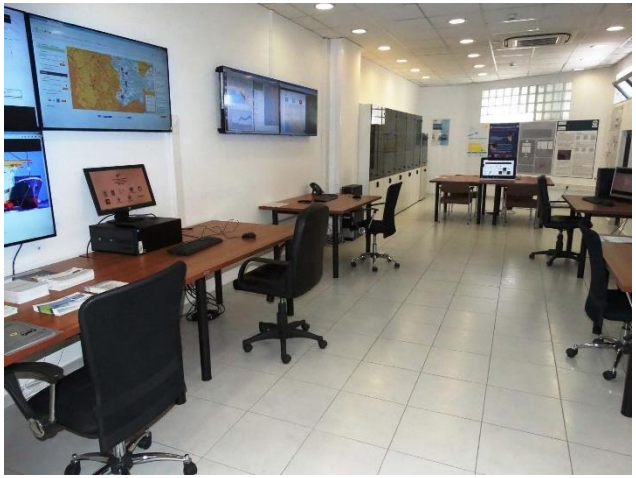
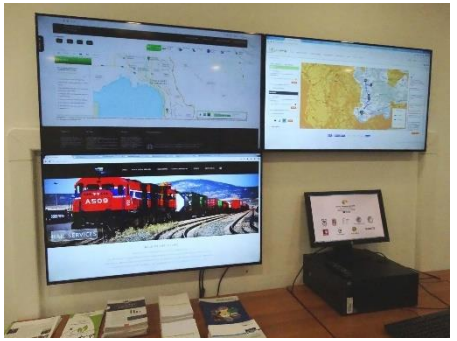
CERTH/HIT having the scientific knowledge, technical capacity and research interest undertook the responsibility to act as data aggregator and develop and run the MMC.



Requirements for the development

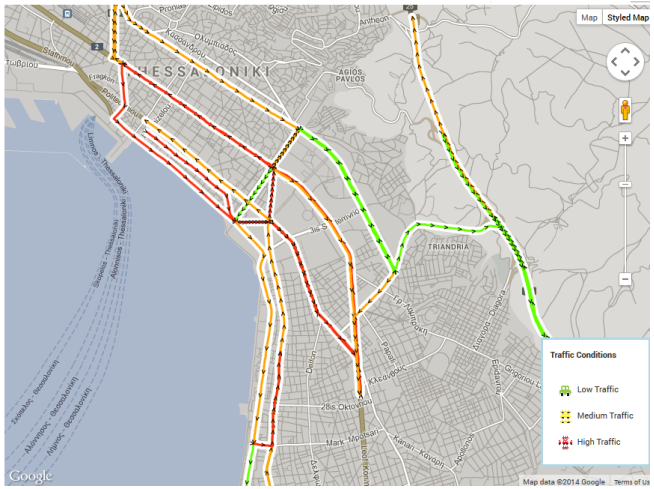
- ✓ Installation of **Big Data infrastructure** for processing, analyzing and visualizing multi-source data in real time
- ✓ Development of advanced **visualization and indicators estimation tools**
- ✓ **Web data grabbers** for collecting activity-related data from social networks
- ✓ **Data analysis and algorithm** development complementary tools
- ✓ Set up of a **transport modelling lab** with dedicated software for static and dynamic traffic assignment, 4 step modelling and traffic micro-simulation



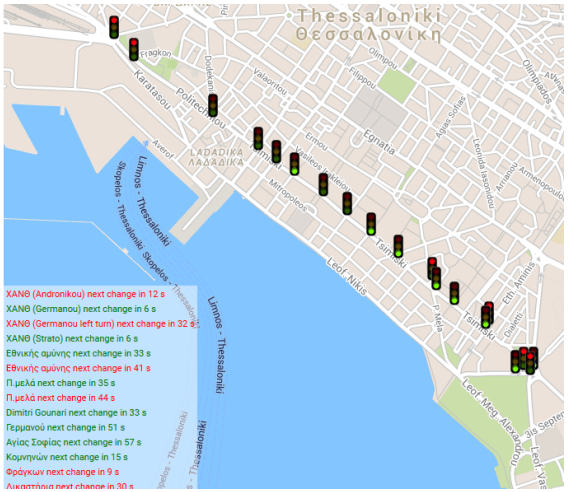
Evidence of Success

The MMC capabilities are used..

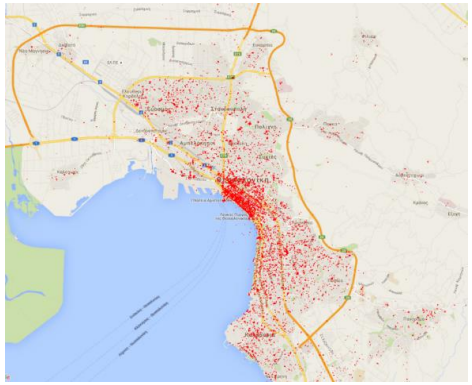
.... for monitoring the operation of the transport system of the main axis



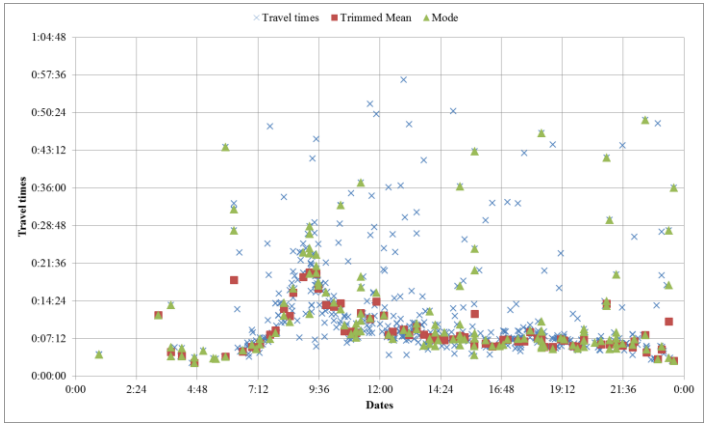
Real time traffic



Traffic control



Estimation of OD matrices



Timeseries data

Evidence of Success

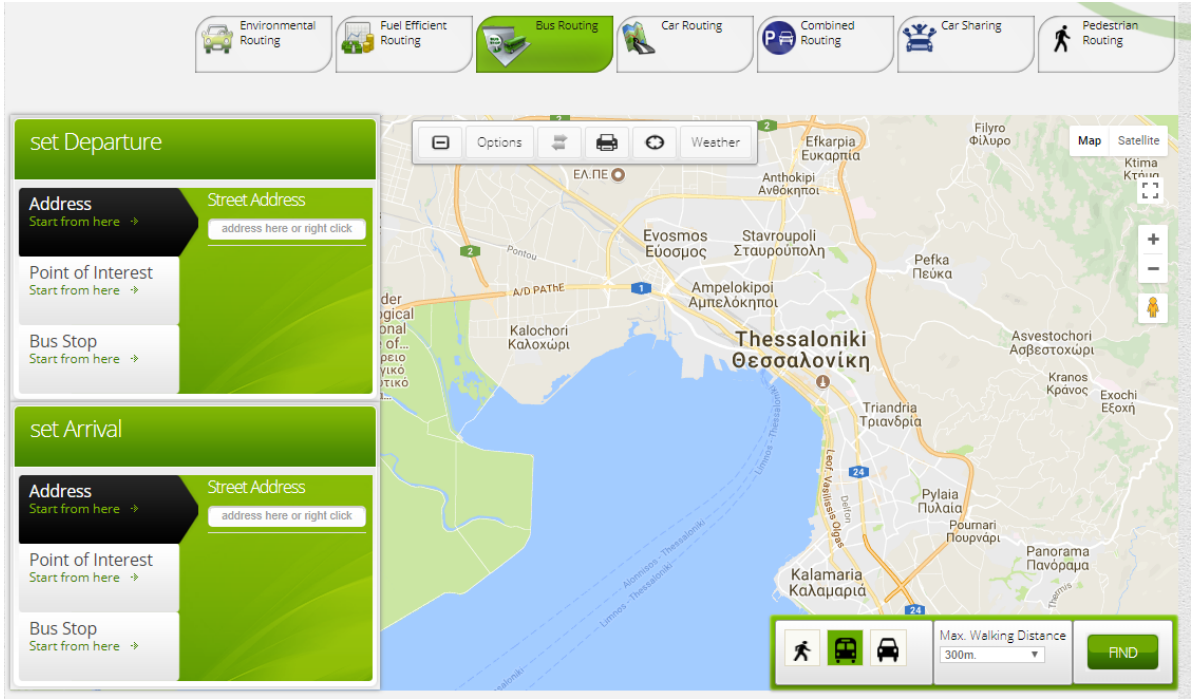
The MMC capabilities are used..

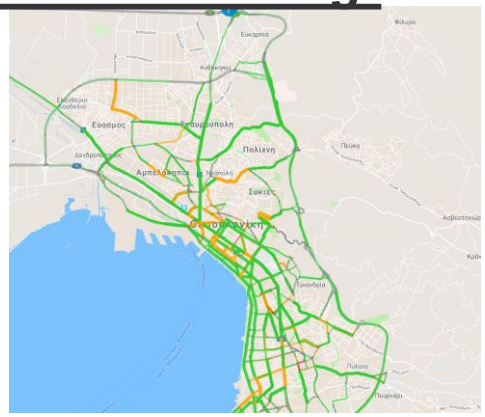
…. to support traffic control that is under the responsibility of the Region of Central Macedonia

Evidence of Success

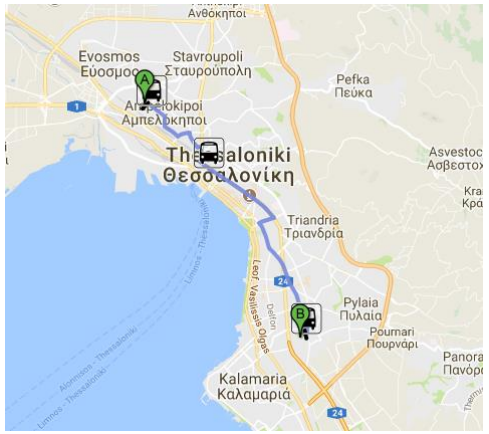
The MMC capabilities are used..

…. for the provision of mobility information to the general public through Thessaloniki's Urban Mobility Centre – www.mobithess.gr





Traveler Information Services (i.e. real time traffic info, PT info, POI, etc.)



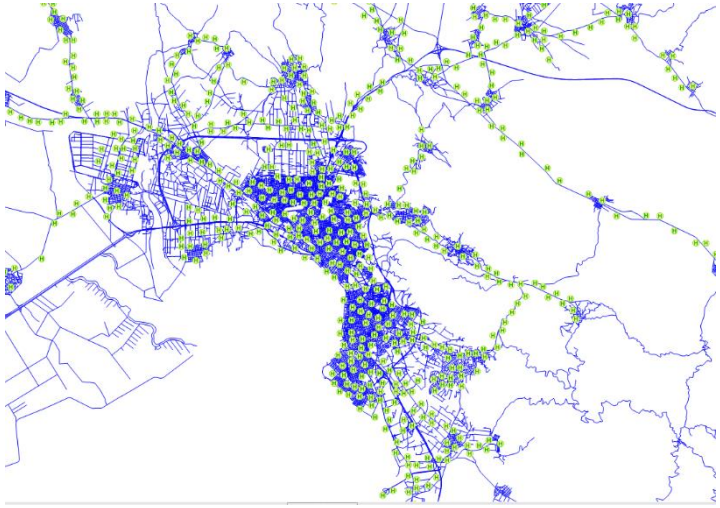
Routing Services for all modes

Evidence of Success

The MMC capabilities are used..

…. for supporting local SUMP development

- ✓ **Providing with data from the MMC**
- ✓ **Testing scenarios in the transport modelling lab**



Difficulties encountered

Main challenges encountered during the implementation of the MMC:

- ✓ **lack of ITS infrastructure to support data collection**
- ✓ **reluctance of actors to share data**
- ✓ **big data management**
- ✓ **need to secure resources for MMC continuous update and improvement**

Potential for learning or transfer

- The MMC **contributes towards the improvement of knowledge** about the city's transport networks and mobility overall.

- A perfect tool for **supporting sustainable urban mobility planning and decision making** that can be considered **transferable to other Regions and cities, especially large ones/with metropolitan character** where several mobility aspects need to be integrated.