LIDA. Monitors traffic to generate knowledge

LIDA generates traffic information for traffic managers, municipalities, and motorway concession holders, detecting the Bluetooth device in vehicles



Contact information

Address: "CeDInt-UPM, Campus de Montegancedo, 28223 Pozuelo de Alarcón (Madrid) " Phone number: 910679600 Website: cedint.upm.es Email: abrodriguez@etsit.upm.es

Technological Offers type

Technological solutions

Research and innovation areas

- Climate, Energy and Mobility
- Digital Technologies, Artificial Intelligence, Cybersecurity, 5G, Robotics

ODS



Available from: 2020

Where?

Biometry, Biosignals, Safety and Smart Mobility Group Home Automation Centre, CEDINT

Keywords: | mobility | transport

Brief description of the technology solution and the added value it provides

LIDA is a robust system that generates relevant traffic information, deployed in Madrid in real operation conditions and failure-free since May 2014. LIDA provides a technological solution to the road mobility problem which generates annual losses of 88.000 million euros in USA and 839 million euros in the city of Madrid. LIDA acts in the market of traffic information and roadway sensors, which is estimated to reach a global turnover of 1.700 million euros in 2016.

Description of the technological base

LIDA provides a technological solution that generates traffic information in cities, highways and roads, by means of detecting the Bluetooth device embedded in vehicles.

LIDA generates detailed information about travel times, which cannot be provided by traditional systems based on magnetic loops. At the same time, this information fulfills the requirements imposed by municipalities regarding reliability, which is not reached by social network-based solutions.

In addition, LIDA improves the number-plate recognition systems both in cost and availability given that these solution cannot operate under unfavorable weather conditions. Finally, compared to other Bluetooth-based competitors LIDA allows the exact identification of vehicles, which results in a more accurate and cost-effective solution.

"LIDA provides accurate travel time information to traffic managers, municipalities, and motorway concession holders"

Market demands

ICT applied to Mobility and Intelligent Transportation Systems

- In general, the main need of the traffic information and roadway sensors market is to provide knowledge about the flow of vehicles, which allows implementing a traffic management that avoids congestion.
- Congestion makes every driver worldwide waste more than 30 hours a year in average. This time corresponds to 88.000 million euros annual losses in USA and 839 million euros just in the city of Madrid.

"LIDA gives solution to the need of generating travel time information in cities and roads, based on an accurate, scalable, and cost effective vehicle identification"

Competitive advantages

- LIDA has been created in collaboration with traffic managers and municipalities. LIDA has been developed from the cooperation between UPM and SICE (leader in Intelligent Transportation Systems worldwide) and the feedback of the Municipality of Madrid, as final user.
- Cost-effective. LIDA gives answer to a basic need for this type of solutions: scalability. LIDA has been designed considering the
 optimization of its price and operational costs.
- Robustness: LIDA has been tested in real operation, presenting no failures since its deployment in 2014.
- In short, LIDA provides a solution to the following needs: Transparent vehicle identification; Travel time calculation; Costeffective; System scalability.

Development stage

- Concept
- Research
- Lab prototype
- Industrial prototype
- Production

Contact

Contacto LIDA

Ana Belén Rodríguez González; e: abrodriguez@etsit.upm.es

Juan José Vinagre Díaz; e: jjvdiaz@etsit.upm.es

Mark Wilby; e: mrwilby@etsit.upm.es

Contacto UPM

Área de Innovación, Comercialización y Creación de Empresas

Centro de Apoyo a la Innovación Tecnológica - UPM

e: innovacion.tecnologica@upm.eS