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# Smart city platform for environmental and traffic monitoring and simulation

Within the ITEA Project ESTABLISH (Environmental Sensing To Act for a Better quality of LIfe: Smart Health), partners Prodevelop and HI-Iberia have developed a smart city platform with a set of smart services to monitor and make decisions on the city traffic and pollution, as well as providing optimised routes for users.

Briefly, the platform architecture is composed of several layers. The acquisition layer is responsible for loading and cleaning information from various open data sources such as traffic, air pollution, public transport or weather, the knowledge layer stores and analyses the information, the interconnection layer allows

following services: a mobile app for citizens, a web app for pollution and traffic predictions and simulations, and a web app for real-time data visualisation dashboards. The mobile app provides some real-time mobility recommendations and ecological routes using

connection with other solutions, and the smart

services layer includes the mobility services.

As a final result, this platform includes the

mobile app provides some real-time mobility recommendations and ecological routes using data fusion and deep learning techniques.

Moreover, one of the web apps provides city authorities help on the urban mobility planning bringing them seven-day predictions about traffic and pollution and simulations of pollution scenarios in the city; meanwhile the other

web app, a city authority management dashboard, uses a complex event detector to define time-series events.

At this stage, Prodevelop and HI-Iberia in conversation with Valencia and Madrid City Councils for the deployment of a few pilots prior to future commercialisation. If you are interested in learning more about the possibilities of this platform for you or your city, do not hesitate to contact Ismael Torres: itorres@prodevelop.es and Diego Fuentes: dfuentes@hi-iberia.es, the corresponding Project Managers in Prodevelop and HI-Iberia

More information

https://itea3.org/project/establish.html



Figure 1: Bike stations availability



Figure 2: Web app for pollution simulation and prediction

# 2020 KOREA EUREKA DAY



On 26 & 27 May 2020, the the Ministry of Trade, Industry and Energy of Korea, Korea Institute for Advancement of Technology and the Netherlands Eureka Chairmanship will host the 2020 Korea Eureka Day.

The event will aim to attract entrepreneurs, researchers, academia representatives and all interested stakeholders from Eureka's cross-continental membership to Korea and provide them with the platform to initiate new and expand existing partnerships in the attempt to address societal challenges through innovation.

# ETRI – ITEA Information session

Last year during a visit by a Korean delegation at the ITEA Office, it was agreed to intensify the collaboration between ITEA and Korean partners. As a follow up of that, ITEA will host an information session at the Korea Eureka event together with ETRI, the National AI Research institute and active ITEA project partner. During this session, which will take place in the morning of 27 May, attendees will learn about the opportunities to engage in ITEA and several Korean project partners will share their experiences. We look forward to welcoming you there!

## More information

http://www.eurekaday2020.kr/

Note: Due to the outbreak of the COVID-19 (Corona) virus in Korea, the dates of the Eureka Korea Days 2020 might be subject to change. We will keep you informed.