

Cloud innovations signal the future for urban mobility

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A ground breaking EU project has delivered a cloud-based platform along with a range of apps and tools to help get European cities moving sustainably.

Whilst cities across Europe are waking up to the economic, social and environmental benefits of sustainable urban transport, communicating to citizens the options that are available remains a challenge. In order to address this, an existing cloud-based platform has been combined with new functionalities to enable local authorities and businesses across Europe to provide cutting edge online services for citizens and customers.

The EU-funded European Cloud Marketplace for Intelligent Mobility (ECIM) project, launched in January 2014, has built upon the success of the European Platform for Intelligent Cities (EPIC) to create a marketplace for transport solutions. This is a place where [service](#) providers, data providers and developers can come together and co-create innovative applications for citizens.

The platform taps into the potential of cloud computing, which is about sharing computing resources rather than having local servers or personal devices handle each individual

application. This is a highly efficient means of delivering services, and offers end users potentially unlimited resources for their applications on an on-demand basis. Mobility was used as a validation scenario, as these services can be easily migrated to cloud infrastructure and are consistently cited as high priorities by citizens and public service providers alike.

Throughout the project, 14 partners from five European countries worked collectively and in cooperation with other actors, such as mobility service providers and public authorities, to enable cities and business to easily migrate their services to the cloud and to facilitate new service creation. Pilot projects were carried out in Barcelona, Paris and Brussels. The project also sought to encourage the cross-border adoption of cloud-based services in Europe and beyond.

For example, by merging real-time management of on-street and off-street parking availability with public sector transport options, cloud-based platforms enable cities to encourage more environmentally friendly modes of transport and save citizens time. As the project developed, new services were included including car and bike sharing options and electric vehicle (EV) charging stations. When the project was officially completed in June 2016, ECIM resembled a truly multi-modal solution, capable of addressing the mobility needs of a contemporary city.

Once this platform was up and running, a set of common Application Programme Interfaces (APIs) was promoted through the SmartMobility.io initiative. These APIs sought to standardise the ways in which mobility services could be made available to developers, and represented an important step towards the creation and subsequent improvement of the apps tested in the three pilot cities. They provide a framework for harmonising custom API formats used by different mobility service providers, and allow developers to

create new innovative apps for cities and citizens.

Some of these [mobility apps](#) were co-designed and tested in the three test cities. These multimodal apps combine a range of different mobility services, from parking to payment, to public transport and bike sharing, and the ones in Brussels and Paris include a single-sign-on functionality, allowing users to access and pay for parking services of different providers using a single user account.

Sustainability workshops were also held to streamline views on the most suitable business model for ECIM, as well as to find consensus on how to make the first steps toward commercialisation following the project's completion. Many partners have expressed strong interest in taking ECIM to the next level, which includes - but is not limited to - the creation of a company focused on smart mobility.

More information: Project website: www.ecim-cities.eu/

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