THE EUROPEAN R&D&i PROJECT MOBIWALLET WILL ALLOW MOBILE PAYMENT ON EVERY TRANSPORTATION MODE

- Indra is coordinating the consortium of 15 companies and government bodies that is developing the project, which will be piloted in the cities of Santander, Florence, Pisa and Novi Sad and the West Midlands region.

- MobiWallet will turn any smartphone into a payment terminal with top-up on the go, anywhere, thanks to technologies like NFC tags, 2D barcodes, interactive websites and augmented reality.

- An innovative platform will process the payment models of the different transport operators, promoting interoperability and offering citizens advanced, customized services in real time.

The goal of the European R&D&i project MobiWallet is to develop a unified payment platform for any urban transportation mode, public or private, which will allow users not only to pay via any smartphone but also access special offers, discounts and other advanced, customized services in real time. With a budget of €4.3 million, financed through the EU Innovation and Competitiveness Framework Program (CIP), MobiWallet will provide transport users and cities with new technologies, promoting smarter, cheaper and more sustainable mobility, greater energy efficiency, and the transition toward smart cities.

The unified payment collection and management platform developed by the project will integrate the various schemes used by different transport operators, facilitating the mobile payment of bus, subway, taxi and streetcar fares, the hire of public bicycles, and even public parking lot and controlled parking zone fees for motorists. Citizens will be able to top up their balance on the go, anywhere in the city, and access real-time information about public transport services. MobiWallet will therefore permit the creation of a unified urban transport system while simultaneously facilitating intermodality and the combined use of different transportation modes, with a special emphasis on the needs of passengers with reduced mobility.

Moreover, the new solution will incorporate a suite of tools, including various Business Intelligence apps, to offer citizens real-time advanced services like customized journey planners; special offers and discounts to promote certain types of environment-friendly transportation modes; urban parking lot reservations and payments to facilitate private transport; apps to turn taxis into a multiple-user mode; and customized services to encourage the mobility of people with disabilities or impairments. Thanks to these new...
services, MobiWallet will improve transport efficiency and help reduce energy consumption, thus encouraging more sustainable mobility.

**Pilots in Santander, Florence/Pisa, Novi Sad and the West Midlands**

Indra, the multinational consultancy and technology corporation, is leading the consortium of 15 companies and government bodies which, organized into the four national groups of Spain, Italy, the United Kingdom and Serbia, will carry out the four pilot studies to test the solutions developed in Santander, Florence and Pisa, the West Midlands region, and the city of Novi Sad in Serbia. Indra is also coordinating the Spanish group comprising Banco Santander, Santander City Council and the small technology enterprise TST. The Italian pilot will be conducted by Intecs in association with the National Research Council of Italy (CNR), Aleph, GEST and Florence City Council. CENTRO is leading the British group, in collaboration with Transport and Travel Research (TTR), and DunavNet will carry out the Serbian pilot in association with JGSP Novi Sad and the city council.

In the case of Santander, Indra will lead the development of the pilot, which will consist in deploying a unified payment system for the different transport services: bus, public bicycle, taxi, and the city’s private ferry service (Pedreñeras). The solution will include specific payment services and services for people with disabilities or reduced mobility.

The Italian pilot, which will be deployed in the cities of Florence and Pisa, is led by Intecs spa. The partnership is composed by the National Research Council of Italy (CNR), the transport company Gestione ed Esercizio del Sistema Tranviario (GEST spa), the Florence City Council and the technology SME Aleph srl. This pilot aims to create an unified payment platform in order to provide to users a wide range of interoperable transport services, both public and private. Beside the car-parking payment, the pilot will allow end-users to purchase tram tickets and will integrate services for bike-sharing rental and car-pooling booking.

Hundreds of users will take part in the MobiWallet pilot in each city and their comments will be collected and analyzed to ensure that the technology solutions implemented meet citizens’ real needs, have maximum impact, and ultimately lead to the transport systems of the future.

**A Variety of Cutting-Edge Technologies**

MobiWallet will validate a wide range of technologies in order to define the criteria for creating a transport payment solution that is exemplary, scalable and adaptable and fulfills the needs of public administrations in small urban and industrial areas as well as in more complex metropolitan scenarios and even extremely diverse operating environments.

Thanks to the use of tags and other elements with NFC (Near Field Communication) technology, this pioneering project will turn any smartphone with an Internet connection into a payment terminal at minimum cost. These tags or smart cards, coupled with the corresponding online infrastructure and contactless scanners, will provide the system with much greater functionalities and intelligence than those offered by any of the existing unified payment solutions.
The use of 2D barcodes and an augmented reality interface are equally inexpensive solutions that will provide citizens with innovative, value-added services. Finally, a payment portal will lend versatility to the solution by allowing users who do not have a latest-generation smartphone to access and pay for services online.

The project will also develop and test various interoperable payment collection and management platforms based on interoperable fare management (IFM) standards like ISO 24014 and EN 15320, which means that the solutions developed in each case can be recycled and used in the final solution adopted.