

MobiWallet - Newsletter #03 - April 2016

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MobiWallet Workshop MOBILITY AND TRANSPORT DIGITAL WALLET

a side event of TRA 2016

6th European Transport Research Conference

PGE Narodowy, Warsaw, Poland 18-21 April 2016

Workshop will be held on
April 18 at 2.30 pm

Warsaw Room

*Meet us at
Stand R-26!*

All TRA delegates are welcome!

TRA
TRANSPORT RESEARCH ARENA

www.traconference.eu



Dear reader,

it is a pleasure for us to send you the third MOBIWALLET Project newsletter. We would like to present the most recent developments accomplished within this European R&D project, with the objective of implementing solutions for Interoperable Fare Management to encourage modal shift and facilitate ease of use of multiple transport options, taking advance of the latest ICT advances and Smartphone capabilities.

It is an important period for our project with all the pilots being in their operational phases and enrolling users from four different locations across Europe, in Santander (Spain), Tuscany (Italy), West Midlands (UK) and Novi Sad (Serbia).

Different scenarios, technologies, services and transport modes are involved in each of them, but sharing the same approach, methodology and common vision of the project towards achieving interoperability at pilot level, and, ultimately, at cross border level. Indeed, in the last months, cross-pilot interoperability features have been implemented that allow for a frictionless travel experience in different European cities. Such features highlight the opportunities we have at european level and the challenges that still need to be tackled.

Updates from the Pilots

Spain

After having announced in our last newsletter that the Ferry and Bus services were already in operation in Santander (Spain), we are proud to announce in this Newsletter that **Taxi and Car Park are also in operation** at this stage. During the last months, all the Spanish partners have been working to implement the needed functionalities at both, app and platform level. Implementations and adaptations to these two modes also included the development of **apps for the new operators** (taxi drivers and car park agent).

This way, travelers only need to carry with them their mobile phone with the MobiWallet Santander app installed. Once they are registered and have their own NFC sticker, they are able to top-up a Virtual Wallet, using their credit card information. With the credit available, they can pre-paid a number of trips for the bus, in which they will perform validation using existing validation equipment installed on board and their NFC sticker attached to their phone. This solution also allows them to select and pay for ferry services at the dock, using equipment provided by the partners. The new developments to integrate taxi and car park are based on QR codes, and allow the use of the credit available in the Virtual Wallet to perform a **post-payment** of these services. Using apps developed within the project, the taxi driver or car park operator can generate a QR code with the information of the service and the cost encoded on it. Users only have to **scan the QR** code using their MobiWallet app, and **accept the payment**. The number of participants in the pilot testing that can use this system continues growing, aimed to reach at least 200 users by the end of project.



Italy

After the successful deployment accomplished last July 2015, the Italian Pilot has entered into the operational phase. All services (urban bus and tram, car parking and car sharing) are daily utilized by the end users registered in the Italian platform. By November, 200 end users had already been registered, reaching the quota of **300 users** on early February. Also, 200 tickets (transactions) have been purchased by users during last months and all transport payments (SMS, mobile credit, QR-code, PayPal) have received a good evaluation by the end users.



In addition, new functionalities are available in the platform: the SIMIS GUI is available now in Italian language, apart from English, and includes a set of specific functionalities related to statistics and services utilization.

Finally, the Italian Consortium has started a strong dissemination campaign: in November the cluster invited **Florence marathon** participants to join the pilot and try out the services. Besides, the Florence Municipality published on January a press release promoting **MobiTickt**, the app provided by MobiWallet Italian Pilot that allows buying tram, bus tickets and pay the car parking around Florence Metropolitan Area.

United Kingdom

The UK pilot offers a seamless user experience, enhancing the overall public transport mobility provisions. The development of a fully integrated Mobiwallet engine has been built and is under testing and deployment stages.

The pilot is based on several systems development and delivery packages, incorporating Journey planning with ticket purchase and payment (web based), through to fulfilment and on vehicle travel. The pilot delivers a new ticket/fares database, enhanced Journey planner 'the Mobiwallet Engine' and fulfilment via NFC and ITSO part 11 remote reader technology.

The UK Pilot has already deployed its NFC and Remote Reader/collector provisions enabling the fulfilment of the purchased ticket remotely via an NFC mobile device or by the 100 remote reader units available across the West Midlands. Fulfilment is now fully operational and used successfully by many of the registered Swift card users. Journey planning system enhancements have also been concluded and integrated in the system, enabling the intelligent ticket functionality direct within the Journey planner user interface. MobiWallet engine functionality has been fine-tuned, and it is being tested via external users.

The MobiWallet engine will provide users with the ability to plan their journey via the enhanced journey-planning tool and select from an intelligent ticket options listing the **best value ticket** for the journey planned. This can then be purchased through the Swift payment portal and fulfilled by NFC mobile device or remote reader as highlighted above, providing a **seamless one stop shop provision** for public transport travel services.



Serbia

The Novi Sad pilot demonstrates the mobile payment, ticketing and route planning in public transport using the smart phones and technologies based on QR codes, optical validation and augmented reality. It aims at providing multimodal transport (bus + rented bike + parking + taxi) by offering **unique, integrated and interoperable** means of payment and ticket validation for most of them.

In addition, a range of useful added value services are being provided to users such as access to information on bus arrival times/positions in real time, real time information on air pollution or some information on tourist landmarks, etc.

At the moment, the public bus, parking space and rental bike services have been put in operation and are available through the specific smartphone application. The smart mobile app allows bus travellers to purchase their tickets either using the cash vouchers or through the Telekom Serbia direct carrier billing channel (soon in production). The ticket is received in a **PKpass format and validated optically** using the QR code placed inside the busses. The bus arrival time and maps with bus and bus stops positions are also available. The parking space payment for different zones is based on sms including the info on parking price and service duration in a confirmation sms. With respect to the rental bike service, NSBike stickers with QR codes providing info on/distance from bus stops as well as from other bike rental station locations are also available. Negotiations with the Maxi taxi company are ongoing with the technical implementation specifications agreed.

Volunteers have finally been activated to provide feedback on using the app as well as on offered related functionalities and services and first feedback has been received

Future work will include incorporation of more transport modes (such as taxi) enabling more payment channels (eCommerce via Intesa Bank, sms based payment) and implementing further improvements on the user interface side.



Interoperability among pilots

Partners have started to work in the implementation of interoperability solutions within different pilot, adopting, at first stage, a pilot-to-pilot approach, allowing seamless travel between the cities involved. Developments have been done to allow Italian and Serbian users to purchase easily urban transport tickets in the other city, as well as to allow Spanish users to buy tickets through the Serbian APP without the need of registering again, and with the possibility of using the credit available in their Spanish Virtual Wallets to acquire Serbian tickets. Further developments and analysis of interoperability and new scenarios will be accomplished during next months, in order to extract recommendations, lessons learned and generalities that could be useful towards achieving a cross-border interoperability.

Measuring success

Success of MobiWallet is being measured through an extensive evaluation programme that is consistently measuring progress across all 4 pilots throughout the project. MobiWallet is evaluated through 4 key elements of evaluation: Functionality testing, Balanced Scorecards (KPI's), Impact Evaluation and Process and Policy evaluation.

Functionality testing examines the effectiveness and reliability of each pilot's technology and was completed in early 2015. Results from this were used to improve each technology as part of development.

Balanced Scorecards are used to monitor the project progress on defined key performance indicators such as numbers of registered users, number of transactions, or modal split.

Impact evaluation is based on pre and post surveys delivered in 2 phases. The first phase was to trial the impact evaluation method, and provide some preliminary feedback on the pilot deployment. It used small samples of 15-20 participants per trial. Phase one is complete in the Italian and UK pilots, and very close to completion in the Spanish and Serbian pilots. Phase one ran from approximately November to March. Evaluation phase two will run from March until around June, and will aim for sample sizes of around 180 participants per pilot also using pre and post-trial surveys. These surveys will evolve based on feedback and learning from evaluation phase 1, leading to more effective surveys in evaluation phase 2. Analysis on Phase 1 surveys is currently underway, and will be available shortly. Analysis of evaluation Phase 2 will be undertaken during June, ready for final reporting in July.

The final element of MobiWallet evaluation is the **Process and Policy evaluation**. This will involve a focus group in each pilot country with the project delivery partners and other key stakeholders such as the public transport operators, city administration, end users and bank contacts to explore in depth the process of programme delivery. It will also involve one stakeholder workshop where all delivery partners will come together to explore in depth the programme delivery, to identify areas of strength, best practice, and areas where improvements could be made and recommendations for future similar programme delivery.

Second live demonstration in Novi Sad

We are proud to inform that our second live demonstration has taken place with success. The demo was held Novi Sad, Serbia on January 27. 2016. All the partners performed live demonstrations of the functionalities that are available in their pilots. Besides, **pilot-to-pilot interoperability scenarios** were also showcased; in particular, it was shown how a Spanish or Italian user can travel in Novi Sad thanks to the app ecosystem that MobiWallet partners have devised. Several videos for the general public were presented (and now made available on MobiWallet You Tube channel).

Finally a live demonstration showing how easy is to travel in Novi Sad using MobiWallet was performed at the bus stop: by using a mobile, it was possible to have **real-time information** on bus arrival time, to top-up credit and buy a ticket. When the first bus arrived, in an eye blink ticket was validated by scanning a QR code in the bus, allowing traveller to ride!

Several external attendees were present at the live demonstrations, including **Telecom Srbija** with whom special agreements are being discussed for expanding payment options in the Serbian pilot.

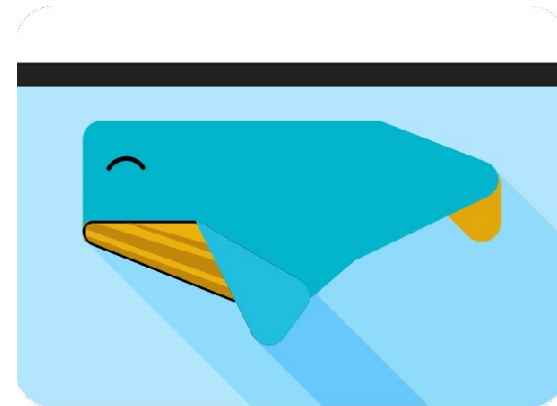


MobiWallet partners and guests at the 2nd Demonstration event

Get Involved



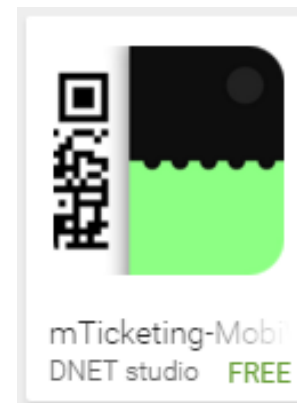
[MobiWallet Santander app](#) allows travellers to use their Smartphone (only for Android) to purchase tickets and fulfil payments in several transport services involved in the pilot in the city of Santander.



Thanks to the [MobiTickt app](#) you can buy your public transport ticket in Tuscany or pay for your parking slot by SMS or PayPal.



Swift is a transport smart card for buses and trams in the West Midlands. [Download this app](#) to view your current balance or products, and to collect top-ups and products that you've bought through your online Swift Account.



Use the [Serbian Pilot MobiWallet app](#) to buy the bus tickets in Novi Sad on selected lines, to reserve the parking space or plan the route through the city including the use of rental bike services.

Attended events



MobiWallet partners met stakeholders and operators from all over Europe at **POLIS annual conference** (19-20 November, Brussels), where a MobiWallet stand was setup and attended during the whole duration of the conference. In addition, an oral presentation was delivered during the first conference day; MobiWallet presentation can be downloaded from Polis Website (<http://www.polisnetwork.eu/2015presentations>).

Our first joint event with **CIVINET UK & Ireland** was held in Birmingham in November 2015. The focus of this public event was on Personal Mobility and the Smartphone (for more information and the agenda of the day see: <http://www.mobiwalletproject.eu/index.php?view=article&id=75>).



MobiWallet delegates were also glad to join the international workshop on **Multimodal Route Planning and Integrated Fare Management organized by CIP PSP Project HoPE**, on 26 November 2015 at the Karlsruhe Institute of Technologies (KIT), Germany. HoPE is a sibling project of MobiWallet being funded under the same CIP PSP call. The workshop was a great opportunity to present MobiWallet ideas and share current achievements with a selected audience of solution providers, stakeholders and city representatives. Indeed, it was possible to make aware of MobiWallet cities like Coventry, Athens, San Sebastian, Molina de Segura, Tallinn and Sofia, discovering their current initiatives in public transport, ITS and IFM and the challenges they are facing in their roadmap toward the smart city status (see <http://www.mobiwallet-project.eu/index.php?view=article&id=71>).

Forthcoming events

MobiWallet is going to participate to **Transport Research Arena (TRA 2016)**, that will be held from 18th to 21st April 2016. Come and meet us at **Stand R-26** in the promenade (Inner Ring Exhibition – Level 0)!

You are also welcome to join the **MobiWallet Workshop** that will be held on **18th April from 2.30 pm in Warsaw room** as a side event of TRA 2016. The workshop will allow you to discover what services are running in our pilots, how we are measuring and evaluating them and the lesson we have learnt so far.

Partner



Coordinator