

PROJECT

IFM PROJECT

Interoperable Fare Management Project

Funding: European (7th RTD Framework Programme)

Duration: Jan 2008 - Jun 2010

Status: Complete with results

Total project cost: €905,021

EU contribution: €740,000



Call for proposal: FP7-ICT-2007-1

[CORDIS RCN : 85567](#)

Background & policy context:

The project expected to significantly lower the barriers to mobility and encourage the use of public rather than private transport, contributing to a reduction of carbon emissions and a reduction or elimination of paper tickets, thus further enhancing the impact of smart media on environment and on the efficiency of public transport.

It was possible to tailor the media to assist specific groups (e.g. existing concessionary travellers, benefit recipients or part-time workers) thereby supporting the Social Inclusion Agenda. The project was based on delivering an ICT environment that supports nomadic passengers. It was delivered through work packages covering trust modelling, privacy modelling, common applications and interoperable media, model of IFM organisations and supporting back office ICT system interfaces. It was managed to ensure effective and efficient consensus and dissemination of best practice among all stakeholders.

The project was designed to provide world leadership in its segment and to deliver results which can be transferred to areas outside of the transportation sector world-wide. It allowed manufacturers and suppliers to offer the end-to-end, lossless nature of IFM the platform and transactions in other fields, thereby reducing time to market and lowering the cost of implementing other comparable schemes.

Objectives:

This project set out to make public transport more user-friendly by facilitating seamless accessibility to different public transport networks. In 2015 payment processes shall no longer be a barrier for the users of public transport.

The objective of the 'Interoperable Fare Management Project' (IFM Project) was to provide travellers with common styles of contactless media throughout Europe which can be used for multiple transport products in different geographic areas and for sustainable modal switching, such as the use of 'Park and Ride', unlike existing smart cards which are restricted to specific city or regional geographies.

Methodology:

This project was aimed at making the mobility of people more efficient and environmentally sustainable by facilitating informed modal switching and the seamless accessibility of public transport. It aimed at innovative, safe and reliable ticketing and fare management across Europe using interoperable smart media with the specific aim of encouraging increased usage of public transport.

The work plan and its work packages are designed to facilitate the following operational impacts:

1. Greater awareness of the benefits of applying smartcard enabled ICT Solutions to Implement harmonised Interoperable Fare Management for scheme for operators, customers and government across Europe.
2. The dissemination of knowledge of how to set up an Interoperable Fare Management scheme, the ICT systems, the players, their roles, and how to achieve the maximum benefits.
3. The spreading of excellence through the description of best practice in meeting European standards.
4. The respect of privacy through the adoption of a common privacy model compatible with the

business needs.

5. The enhancement of security and minimisation of fraud by the adoption of a shared trust model.

Parent Programmes:

[FP7-ICT - Information and Communication Technologies](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Lead Organisation:

Itso Limited

Address:

Quayside Tower Broad Street 4Th Floor
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B12HF
United Kingdom

EU Contribution: €89,298

Partner Organisations:

Urba 2000

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Rue Du Ranelagh 39
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EU Contribution: €36,645

Valsts Akciju Sabiedriba Latvijas dzelzcelis

Address:

Gogola iela 3
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Latvia

EU Contribution: €150,168

Sncf

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34 Rue du Commandant René Mouchotte
75014 PARIS
France

Organisation Website:

<http://www.sncf.com>

EU Contribution: €100,657

Tuv Rheinland Consulting Gmbh

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Am Grauen Stein
51105 Koeln
Germany

Organisation Website:

<http://www.forschungsmanagement.de>; <http://www.tuvpt.de>

EU Contribution: €187,487

The University Of Newcastle Upon Tyne

Address:

Kensington Terrace 6
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NE1 7RU
United Kingdom

Organisation Website:

<http://www.ncl.ac.uk/>

EU Contribution: €49,936

Universite Paris Nanterre

Address:

200 Avenue De La Republique
92001 Nanterre Cedex
France

EU Contribution: €20,124

Union Internationale Des Transport Publics

Address:

Rue Ste. Marie 6
1080 BRUXELLES
Belgium

Organisation Website:

<http://www.uitp.org>

EU Contribution: €66,287

Regie Autonome Des Transports Parisiens

Address:

54 Quai De La Rapee
75599 Paris
France

Organisation Website:

<http://www.ratp.fr>

EU Contribution: €39,398

Technologies:

Information systems
Sustainable urban mobility planning

Development phase: Research/Invention

Key Results:

Project outcomes and the strategy for implementation of Interoperable Fare Management across Europe are described in the Road map for the long term development strategy.

- Roadmap
The project developed a road map towards the Europe-wide concept of Interoperable Fare Management by providing Transport authorities of the Member States with a toolset to build new fare and distribution agreements in order to progressively implement EU-wide Interoperable Fare

Management.

- Trust model

The minimum of common features - the features that are required from an interoperable point of view - of an European Trust Model and the requirements for an European Secure Application Module (EU-SAM) have been defined.

A Trust Model is a tool that helps one visualise and understand the degree of confidence that is intentionally or unintentionally granted to individuals and/or systems, based on the associated risks that are inherent with granting this confidence. The more completely the trust model is defined, the greater awareness one will gain of the threats and vulnerabilities and especially the risks based on those threats and vulnerabilities. The Trust Model should describe how trusted transactions can be made between different fare areas when an unknown customer uses an unknown smart card.

- Privacy model

A set of common rules were proposed for all European countries as an appropriate compromise between information needed for an appropriate services management and customers privacy protection, involving transport operators against undue dissemination of personal data.

- The Applications and Interoperable Media

The common requirements for transport contactless media and the benefits of multi-application media to enlarge interoperability have been identified.

- IFM organisation

The key output of one of the work packages is the proposal for an EU-IFM Alliance that complies fully with the identified organisational requirements.

The developed organisation model meets the following essential requirements:

- help the customer to find the appropriate application and product(s),
- provide downloading of the local or EU Application in a secure manner,
- sell the most appropriate Product in a secure manner,
- support cashless payment in the distribution channel chosen by the customer in a secure manner,
- support the acceptance by the service operator,
- support the convenient use

Strategy targets

An efficient and integrated mobility system: Service quality and reliability

Documents:

 [Road map for the long term development strategy- final version \(Final report\)](#)

STRIA Roadmaps: Smart mobility and services

Transport mode: Multimodal transport

Transport sectors: Passenger transport

Transport policies: Decarbonisation, Societal/Economic issues

Geo-spatial type: Other