

PROJECT

## IT2RAIL

### Information Technologies for Shift to Rail

**Funding:** European (Horizon 2020)

**Duration:** May 2015 - Oct 2017

**Status:** Complete

**Total project cost:** €12,025,000

**EU contribution:** €12,000,000



**Call for proposal:** H2020-MG-2014\_TwoStages

[CORDIS RCN : 193373](#)

#### Objectives:

The IT<sup>2</sup>RAIL -“Information Technologies for Shift to rail” proposal, first step towards the long term IP4 -“IT for an Attractive Railway” SHIFT<sup>2</sup>RAIL Innovation Programme, aims at providing a new seamless travel experience, giving access to a complete multimodal travel offer which connects the first and last mile to long distance journeys.

This is achieved through the introduction of a ground breaking Technical Enabler based on two concepts:

- the traveller is placed at the heart of innovative solutions, accessing all multimodal travel services (shopping, ticketing, and tracking) through its travel-companion.
- An open published framework is providing full interoperability whilst limiting impacts on existing systems, without prerequisites for centralized standardization.

This Technical Enabler will be completely settled in the context of the SHIFT<sup>2</sup>RAIL IP4, and IT<sup>2</sup>RAIL is proposing a reduced approach to the scale of a specified use case without weakening any of the key concepts of IP4, such as the usage of Semantic Web technologies, meta planning on distributed data, travel companion with a protected and secured personal wallet stored in the cloud and including the rights to travel.

The use case will be defined as a specific instantiation of our open concepts, and will benefit from a completely scalable architecture fully instantiated in IP4.

This approach is addressing all the key challenges of the work program, supporting a complete door-to-door intermodal travel offer and proposing a seamless integration of the very diverse existing and future services for planning, one-stop-shop ticketing, and real-time re-accommodation.

Moreover, thanks to an Interoperability framework which insulates travel applications from the standards fragmentation in multimodal transport, IT<sup>2</sup>RAIL liberates business-model innovations in the market-place, guaranteeing the economic self-sustainability of these e-services in the long-term.

#### Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport Shift2Rail - Shift2Rail](#)

**Institute type:** Public institution

**Institute name:** European Commission

**Funding type:** Public (EU)

#### Lead Organisation:

**European Union Road Federation**

**Address:**

Avenue Louise 106  
1050 BRUXELLES  
Belgium

**Organisation Website:**

<http://www.unife.org>

**EU Contribution:** €198,875

**Partner Organisations:**

**Vbb Verkehrsverbund Berlin-Brandenburg Gmbh**

**Address:**

HARDENBERGPLATZ 2  
10623 BERLIN  
Germany

**EU Contribution:** €132,750

**Oltis Group As**

**Address:**

Dr Milady Horakove 1200/27A  
77900 Olomouc  
Czech Republic

**EU Contribution:** €592,313

**Rina Consulting**

**Address:**

RUE BELLiard 2A  
1040 BRUXELLES  
Belgium

**EU Contribution:** €136,850

**Cnc Centro Nuova Comunicazione Srl**

**Address:**

VIA ALESSANDRINI 17  
40126 BOLOGNA BO  
Italy

**EU Contribution:** €69,250

**Sncf**

**Address:**

34 Rue du Commandant René Mouchotte  
75014 PARIS  
France

**Organisation Website:**

<http://www.sncf.com>

**EU Contribution:** €321,892

**Cybernetica As**

**Address:**

MAEALUSE 2

12618 TALLINN  
Estonia

**Organisation Website:**

<http://www.cyber.ee>

**EU Contribution:** €1,520

**Selex Es Spa**

**Address:**

Via Albert Einstein 35  
50013 Campi Bisenzio  
Italy

**Organisation Website:**

<http://www.selex-sas.com>

**EU Contribution:** €138,400

**Fraunhofer Gesellschaft Zur Foerderung Der Angewandten Forschung E.v.**

**Address:**

HANSASTRASSE 27C  
80686 MUNCHEN  
Germany

**Organisation Website:**

<http://www.fraunhofer.de>

**EU Contribution:** €420,375

**Amadeus It Group Sa**

**Address:**

CALLE SALVADOR DE MADARIAGA 1  
28027 MADRID  
Spain

**EU Contribution:** €1,266,312

**Gemalto Sa**

**Address:**

Rue De La Verrerie 6  
92190 Meudon  
France

**Organisation Website:**

<http://www.gemalto.com>

**EU Contribution:** €163,625

**Thales Six Gts France Sas**

**Address:**

Avenue Des Louvresses 4  
92700 Colombes  
France

**EU Contribution:** €2,007,440

**Commissariat A L Energie Atomique Et Aux Energies Alternatives**

**Address:**

RUE LEBLANC 25  
75015 PARIS 15  
France

**Organisation Website:**

<http://www.cea.fr>

**EU Contribution:** €112,144

**Attoma Sarl****Address:**

Rue Titon 25-27  
75011 Paris  
France

**EU Contribution:** €114,625

**Trenitalia Cargo S.p.a.****Address:**

Piazza della Croce Rossa, 1  
00161 ROMA  
Italy

**Organisation Website:**

<http://www.trenitalia.it>

**EU Contribution:** €341,625

**Cefriel Societa Consortile A Responsabilita Limitata****Address:**

VIALE SARCA 226  
20126 MILANO  
Italy

**EU Contribution:** €263,375

**Rail Safety And Standards Board Limited****Address:**

Torrens Street 1 Block 2  
London  
EC1V 1NY  
United Kingdom

**EU Contribution:** €32,961

**D'appolonia****Address:**

Via San Nazaro 19  
16145 GENOA  
Italy

**Organisation Website:**

<http://www.dappolonia.it>

**EU Contribution:** €33,150

**Indra**

**Address:**

Avenida de Bruselas, 35  
Alcobendas Madrid  
Spain

**Organisation Website:**

<http://www.indra.es>

**EU Contribution:** €1,079,625

**Ilunion Tecnologia Y Accesibilidad, S.a.****Address:**

CALLE ALBACETE 3 PISO 2 MIZAR BUILDING  
28027 MADRID  
Spain

**Organisation Website:**

<http://www.technosite.es>

**EU Contribution:** €13,261

**Universitat Politecnica De Catalunya****Address:**

Calle Jordi Girona 31  
8034 Barcelona  
Spain

**Organisation Website:**

<http://www.upc.edu>

**EU Contribution:** €317,375

**European Passengers' Federation Ivzw****Address:**

KORTRIJKSESTEENWEG 304  
9000 GENT  
Belgium

**Organisation Website:**

<http://www.epf.eu>

**EU Contribution:** €101,625

**Hacon Ingenieurgesellschaft Gmbh****Address:**

Lister Strasse 15  
30163 HANNOVER  
Germany

**Organisation Website:**

<http://www.hacon.de>

**EU Contribution:** €1,182,961

**Ferrocarril Metropolitana De Barcelona****Address:**

Carrer 60, n°21-23, Sector A, Zona Franca  
8040 BARCELONA  
Spain

**Organisation Website:**

<http://www.tmb.net>

**EU Contribution:** €177,250

**Avalon Biometrics SI****Address:**

CALLE BASAURI EDIFICIO B 17  
28023 MADRID  
Spain

**EU Contribution:** €0

**Union Internationale Des Transport Publics****Address:**

Rue Ste. Marie 6  
1080 BRUXELLES  
Belgium

**Organisation Website:**

<http://www.uitp.org>

**EU Contribution:** €556,690

**Politecnico Di Milano****Address:**

Piazza Leonardo Da Vinci 32  
20133 Milano  
Italy

**Organisation Website:**

<http://www.polimi.it>

**EU Contribution:** €364,500

**The University Of Nottingham****Address:**

University Park  
Nottingham  
NG7 2RD  
United Kingdom

**EU Contribution:** €44,125

**Sncf****Address:**

2 Place Aux Etoiles  
93200 Saint Denis  
France

**EU Contribution:** €938,481

**Here Global B.v.****Address:**

De Run  
5503 Veldhoven  
Netherlands

**EU Contribution:** €154,875

**Leonardo - Societa Per Azioni**

**Address:**

Piazza Monte Grappa 4  
195 Roma  
Italy

**EU Contribution:** €721,751

**Ilunion Salud Sa**

**Address:**

DON RAMON DE LA CRUZ 38  
28001 MADRID  
Spain

**EU Contribution:** €0

**Technologies:**

Infrastructure management  
Station user modelling and design for optimised passenger flow

**Development phase:** Research/Invention

**STRIA Roadmaps:**

Cooperative, connected and automated transport, Network and traffic management systems, Smart mobility and services

**Transport mode:** Rail transport

**Transport sectors:** Passenger transport, Freight transport

**Transport policies:** Digitalisation

**Geo-spatial type:** Other