

PROJECT

IN2RAIL

Innovative Intelligent Rail

Funding: European (Horizon 2020)

Duration: May 2015 - Apr 2018

Status: Complete

Total project cost: €17,998,546

EU contribution: €17,998,546



Call for proposal: H2020-MG-2014_TwoStages

[CORDIS RCN : 193360](#)

Objectives:

IN2RAIL is to set the foundations for a resilient, consistent, cost-efficient, high capacity European network by delivering important building blocks that unlock the innovation potential that exists in SHIFT2RAIL: innovative technologies will be explored and resulting concepts embedded in a systems framework where infrastructure, information management, maintenance techniques, energy, and engineering are integrated, optimised, shared and exploited.

IN2RAIL will make advances towards SHIFT2RAIL objectives: enhancing the existing capacity fulfilling user demand; increasing the reliability delivering better and consistent quality of service; reducing the LCC increasing competitiveness of the EU rail system.

To achieve the above, a holistic approach covering Smart Infrastructures, Intelligent Mobility Management (I2M) and Rail Power Supply and Energy Management will be applied.

Smart Infrastructure addresses the fundamental design of critical assets - switches and crossings and tracks. It will research components capable of meeting future railway demands and will utilise modern technologies in the process. Risk and condition-based LEAN approaches to optimise RAMS and LCC in asset maintenance activities will be created to tackle the root causes of degradation.

I2M researches automated, interoperable and inter-connected advanced traffic management systems; scalable and upgradable systems, utilising standardised products and interfaces, enabling easy migration from legacy systems; the wealth of data and information on assets and traffic status; information management systems adding the capability of nowcasting and forecasting of critical asset statuses.

Rail Power Supply and Energy Management create solutions to improve the energy performance of the railway system. Research on new power systems characterised by reduced losses and capable of balancing energy demands, along with innovative energy management systems enabling accurate and precise estimates of energy flows.

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:

Network Rail Infrastructure Limited

Address:

1 Eversholt Street
London
NW1 2DN
United Kingdom

EU Contribution: €1,441,168

Partner Organisations:

Lulea Tekniska Universitet

Address:

Universitetsområdet Porson
971 87 Lulea
Sweden

Organisation Website:

<http://www.luth.se>

EU Contribution: €533,481

Ingenieria Y Economia Del Transporte Sme Mp Sa

Address:

Avenida Del Partenón
28042 Madrid
Spain

EU Contribution: €22,015

Evoleo Technologies Lda

Address:

Rua Goncalo Mendes Maia 1350 1 H
4425 656 Maia
Portugal

EU Contribution: €60,156

Dotvision

Address:

42 RUE DE L INNOVATION ECOPOLE DE SENART
77550 MOISSY CRAMAYEL
France

EU Contribution: €264,290

Ansaldo Sts S.p.a.

Address:

Via Paolo Mantovani 3-5
16151 Genova
Italy

Organisation Website:

<http://www.ansaldo-sts.com>

EU Contribution: €1,300,734

Rete Ferroviaria Italiana

Address:

Piazza Della Croce Rossa
161 Roma
Italy

Organisation Website:

<http://www.rfi.it>

EU Contribution: €319,869

Fcc Construcccion Sa

Address:

CALLE BALMES 36
08007 BARCELONA
Spain

Organisation Website:

<http://www.fccco.es>

EU Contribution: €201,997

Deutsche Bahn Ag

Address:

Postdamer Platz 2
10785 BERLIN
Germany

Organisation Website:

<http://www.deutschebahn.com>

EU Contribution: €461,625

Systra Sa

Address:

Rue Henry Farman 72-76
75015 Paris 09
France

Organisation Website:

<http://www.systra.com>

EU Contribution: €279,984

European Union Road Federation

Address:

Avenue Louise 106
1050 BRUXELLES
Belgium

Organisation Website:

<http://www.unife.org>

EU Contribution: €165,688

Bombardier Transportation Sweden Ab**Address:**

OSTRA RINGVAGEN 2
721 73 VASTERAS
Sweden

Organisation Website:

<http://www.bombardier.com>

EU Contribution: €633,888

Sncf**Address:**

34 Rue du Commandant René Mouchotte
75014 PARIS
France

Organisation Website:

<http://www.sncf.com>

EU Contribution: €461,938

Rheinisch-Westfaelische Technische Hochschule Aachen**Address:**

Templergraben
52062 Aachen
Germany

Organisation Website:

<http://www.rwth-aachen.de>

EU Contribution: €200,000

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

HANSASTRASSE 27C
80686 MUNCHEN
Germany

Organisation Website:

<http://www.fraunhofer.de>

EU Contribution: €92,125

Thales Six Gts France Sas**Address:**

Avenue Des Louvresses 4
92700 Colombes
France

EU Contribution: €375,313

Trafikverket**Address:**

RodaVagen 1
781 89 BORLANGE
Sweden

Organisation Website:

<http://www.trafikverket.se>

EU Contribution: €680,424

The University Of Birmingham**Address:**

Edgbaston
Birmingham
B15 2TT
United Kingdom

Organisation Website:

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

EU Contribution: €164,120

Sygnity Spolka Akcyjna**Address:**

UL. FRANCISZKA KLIMCZAKA, NR 1
02 797 WARSZAWA
Poland

EU Contribution: €30,000

D'appolonia**Address:**

Via San Nazaro 19
16145 GENOA
Italy

Organisation Website:

<http://www.dappolonia.it>

EU Contribution: €699,250

Comsa Instalaciones Y Sistemas Industriales Sa**Address:**

AVENIDA ROMA 25-27
08029 BARCELONA
Spain

Organisation Website:

<http://www.comsaemte.com>

EU Contribution: €380,250

European Federation Of Railway Track Work Contractors**Address:**

2, rue Eucosider
4714 PETANGE
Luxembourg

Organisation Website:

<http://www.efrtc.org>

EU Contribution: €62,813

Deutsches Zentrum Fr Luft Und Raumfahrt E.v**Address:**

Linder Hoehe
51147 KOELN
Germany

Organisation Website:

<http://www.dlr.de>

EU Contribution: €453,902

Neelogy**Address:**

39 RUE DES GRANGES GALAND
37550 SAINT-AVERTIN
France

EU Contribution: €191,253

Kompetenzzentrum - Das Virtuelle Fahrzeug Forschungsgesellschaft M.b.h.**Address:**

Inffeldgasse 21a / 1. Stock
8010 GRAZ
Austria

Organisation Website:

<http://www.v2c2.at>

EU Contribution: €96,281

Indra**Address:**

Avenida de Bruselas, 35
Alcobendas Madrid
Spain

Organisation Website:

<http://www.indra.es>

EU Contribution: €68,000

Embedded Rail Technology Ltd**Address:**

ROSEHILL HOUSE 1 WILFRED STREET
DERBY
DE23 8GG
United Kingdom

EU Contribution: €286,281

Vossloh Cogifer Sa**Address:**

Avenue Victor Hugo 54
92500 Rueil Malmaison
France

EU Contribution: €27,137

Izt Institut Fuer Zukunftsstudien Und Technologiebewertung Gemeinnutzige Gmbh**Address:**

Schopenhauerstrasse 26
14129 Berlin
Germany

EU Contribution: €250,000

Gridnet S.a.**Address:**

ELEFTERIOU VENIZELOU 110
17122 NEA SMYRNI
Greece

EU Contribution: €100,000

Hacon Ingenieurgesellschaft Gmbh**Address:**

Lister Strasse 15
30163 HANNOVER
Germany

Organisation Website:

<http://www.hacon.de>

EU Contribution: €666,577

University Of Southampton**Address:**

Highfield
Southampton
SO17 1BJ
United Kingdom

Organisation Website:

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

EU Contribution: €338,294

Mer Mec S.p.a.**Address:**

via Oberdan, 70
70043 MONOPOLI
Italy

Organisation Website:

<http://www.mermec.it>

EU Contribution: €462,778

Strukton Rail Bv**Address:**

Westkanaaldijk 2
3542 DA Utrecht
Netherlands

EU Contribution: €471,082

Loughborough University**Address:**

Ashby Road
Loughborough
LE11 3TU
United Kingdom

Organisation Website:

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

EU Contribution: €187,088

Politecnico Di Milano**Address:**

Piazza Leonardo Da Vinci 32
20133 Milano
Italy

Organisation Website:

<http://www.polimi.it>

EU Contribution: €199,863

The University Of Nottingham**Address:**

University Park
Nottingham
NG7 2RD
United Kingdom

EU Contribution: €196,288

Universidade Do Porto**Address:**

Praca Gomes Teixeira
4099 002 Porto
Portugal

EU Contribution: €60,063

University Of Bristol**Address:**

BEACON HOUSE QUEENS ROAD
BRISTOL
BS8 1QU
United Kingdom

Organisation Website:

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

EU Contribution: €289,688

Caf Signalling S.I**Address:**

Sepulveda 7
28108 Alcobendas
Spain

EU Contribution: €205,168

Institut De Recherche Technologique Systemx

Address:

8 AVENUE DE LA VAUVE
91120 PALAISEAU
France

EU Contribution: €240,000

3Deling Sp Zoo

Address:

UL. WINCENTEGO POLA 7/46
31 532 KRAKOW
Poland

EU Contribution: €30,000

The University Of Huddersfield

Address:

Queensgate
Huddersfield
HD13DH
United Kingdom

EU Contribution: €360,285

Administrador De Infraestructuras Ferroviarias

Address:

CALLE HIEDRA EST CHAMARTIN EDIFICIO 23 SN
28036 MADRID
Spain

Organisation Website:

<http://www.adif.es>

EU Contribution: €400,000

Tata Steel France Rail Sa

Address:

RUE DU MARECHAL FOCH 164
57700 HAYANGE
France

EU Contribution: €20,071

Università Degli Studi Di Genova

Address:

N/a
16126 Genova
Italy

EU Contribution: €213,431

Obb-Infrastruktur Ag

Address:

Vivenotgasse 10
1120 Vienna
Austria

EU Contribution: €87,225

Railenium**Address:**

180 Rue Joseph-Louis Lagrange
59540 Valenciennes
France

Organisation Website:

<https://railenium.eu/en/>

EU Contribution: €286,980

Azd Praha Sro**Address:**

ZIROVNICKA 3146/2, ZABEHLICE
106 00 PRAHA
Czech Republic

Organisation Website:

<http://www.azd.cz>

EU Contribution: €150,000

Acciona Construccion Sa**Address:**

Avenida De Europa 18
28108 Alcobendas
Spain

Organisation Website:

<http://www.acciona-infraestructuras.es>

EU Contribution: €152,469

Alstom Transport Sa**Address:**

3 Avenue André Malraux
92300 LAVALLOIS-PERRET
France

Organisation Website:

<http://www.alstom.com>

EU Contribution: €405,400

Siemens Ag**Address:**

Wittelsbacherplatz 2
80333 MUENCHEN
Germany

Organisation Website:

<http://www.siemens.com>

EU Contribution: €1,571,119

Universita Degli Studi Di Roma "la Sapienza"

Address:

Piazzale Aldo Moro 5
00185 ROMA
Italy

Organisation Website:

<http://dma.ing.uniroma1.it>

EU Contribution: €69,896

Chalmers Tekniska Hoegskola Ab

Address:

-
41296 GOTHENBURG
Sweden

Organisation Website:

<http://www.chalmers.se>

EU Contribution: €630,804

Technologies:

Infrastructure management
Decision Support Tools for infrastructure management

Development phase: Research/Invention

STRIA Roadmaps: Infrastructure

Transport mode: Rail transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Other specified

Geo-spatial type: Other