

PROJECT

PIVOT2

Performance Improvement for Vehicles on Track 2

Funding: European (Horizon 2020)

Duration: Oct 2019 - Dec 2022

Status: Ongoing

Total project cost: €40,155,405

EU contribution: €17,845,062



Call for proposal: H2020-S2RJU-CFM-2019

[CORDIS RCN : 226984](#)

Objectives:

PIVOT2 is a continuation of the PIVOT project which was scheduled to finish in September 2019.

PIVOT2 will build on the work and concepts of PIVOT and move all of these concepts to higher TRL levels.

The overall ambition of PIVOT2 is to develop technologies that are lighter, more energy efficient, more comfortable for passengers and with a lower impact on the track, thereby reducing the life cycle cost not only of the vehicle itself, but of the entire railway system.

Technologies that increase the operational reliability of trains, causing less travel disruptions, ensuring that passengers get to destination on time and delivering a better service are also objectives. It is expected that technologies developed should automatically promote the increase of the transport capacity of railway lines.

The ambitions of Shift2Rail, which are inherited by PIVOT2, require substantial ground-breaking improvements in the six key technology areas addressed by the project. Indeed, current vehicle solutions are getting closer to their enhancement limits and new radical proposals must be envisaged to accomplish the goals. PIVOT2 will be dealing with the same five key technical demonstrator (TD) areas that were advanced in PIVOT, these are Car body shell, Running gear, Brakes, Accessibility and Doors and Modular Interiors. Within these areas the results are expected to achieve a TRL 7. A new TD for Heating, Ventilation and Air Conditioning (HVAC) has been added which should achieve a TRL 4.

Parent Programmes:

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

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Lead Organisation:

Siemens Mobility Gmbh

Address:

OTTO-HAHN-RING 6
81379 MUNCHEN
Germany

EU Contribution: €2,666,315

Partner Organisations:

Construcciones Y Auxiliar De Ferrocarriles Investigacion Y Desarrollo SI**Address:**

JOSE MIGUEL ITURRIOZ 26
20200 BEASAIN
Spain

Organisation Website:

<http://www.caf.net>

EU Contribution: €648,590

Deutsche Bahn Ag**Address:**

Postdamer Platz 2
10785 BERLIN
Germany

Organisation Website:

<http://www.deutschebahn.com>

EU Contribution: €97,768

Fundacion Para La Investigacion, Desarrollo Y Aplicacion De Materiales Compuestos**Address:**

Avda Rita Levi Montalcini (Tecnogetafe) 29
28906 Getafe
Spain

Organisation Website:

<http://www.fidamc.es>

EU Contribution: €754,375

Sncf Mobilites**Address:**

9 RUE JEAN-PHILIPPE RAMEAU
93200 ST DENIS
France

Organisation Website:

<http://www.sncf.fr>

EU Contribution: €934,010

Fundacion Tecnalia Research & Innovation**Address:**

PARQUE CIENTIFICO Y TECNOLOGICO DE GIPUZKOA PASEO MIKELETEGI 2
20009 DONOSTIA/SAN SEBASTIAN (GIPUZKOA)
Spain

Organisation Website:

<http://www.tecnalia.com>

EU Contribution: €702,280

Trafikverket**Address:**

RodaVagen 1
781 89 BORLANGE
Sweden

Organisation Website:
<http://www.trafikverket.se>

EU Contribution: €555,750

Cp - Comboios De Portugal Epe

Address:
CALCADA DO DUQUE 20
1249-109 LISBOA
Portugal

EU Contribution: €17,775

Network Rail Infrastructure Limited

Address:
1 Eversholt Street
London
NW1 2DN
United Kingdom

EU Contribution: €268,488

Patentes Talgo SI

Address:
Paseo Del Tren Talgo 2
28290 Las Rozas De Madrid
Spain

EU Contribution: €2,436,303

Virtual Vehicle Research Gmbh

Address:
INFFELDGASSE 21 A
8010 GRAZ
Austria

Organisation Website:
<http://www.v2c2.at>

EU Contribution: €174,621

Knorr Bremse Systeme Fr Schienenfahrzeuge Gmbh

Address:
Moosacher Strasse 80
401060 MUNCHEN
Germany

Organisation Website:
<http://www.knorr-bremse.com>

EU Contribution: €1,954,883

Bombardier Transportation Gmbh

Address:

EICHHORNSTRASSE 3
10785 BERLIN
Germany

Organisation Website:

<http://www.bombardier.de/en/transportation>

EU Contribution: €2,199,069

Aernnova Aerospace S.a.u.**Address:**

LEONARDO DA VINCI Parque Tecnologico de ALAVA 13
01510 MIÑANO (ALAVA)
Spain

Organisation Website:

<http://www.aernnova.com>

EU Contribution: €2,057,266

Faiveley Transport Italia Spa**Address:**

VIA VOLVERA 51
10045 PIOSSASCO TO
Italy

Organisation Website:

<http://www.faiveleytransport.com>

EU Contribution: €2,287,359

Alstom Transport Sa**Address:**

48 RUE ALBERT DHALENNE
93400 SAINT OUEN
France

Organisation Website:

<http://www.alstom.com>

EU Contribution: €90,210

Technologies:

Life cycle analysis

Degradation and structural models to develop more realistic life cycle cost and safety models

Development phase: Validation

Rail vehicle design

More efficient rail wagons

Development phase: Demonstration/prototyping/Pilot Production

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Rail transport

Transport sectors: Passenger transport, Freight transport
Environmental/Emissions aspects, Other

Transport policies: specified

Geo-spatial type: Other

