

PROJECT

PINTA3

IP1 Traction TD1- Phase 3 and HVAC TD8

Funding: European (Horizon 2020)

Duration: Dec 2020 - May 2023

Status: Ongoing

EU contribution: €8,583,804



Call for proposal: H2020-S2RJU-CFM-2020

[CORDIS RCN : 232883](#)

Background & policy context:

This proposal has been developed as the last phase of the work which will be developed within the Technical Demonstrators Traction (TD1.1) and HVAC (TD1.8) during the implementation of Shift2Rail. It will take place after PINTA2 and PIVOT-2. The ultimate goals of TD Traction and TD HVAC are, from one side to bring to the market a new generation of traction drive equipment and, on the other side, to develop Green house gases free HVAC.

Objectives:

The proposal PINTA3 addresses the topic S2R-CFM-IP1-01-2020 Demonstrators for the next generation of traction systems including Silicon Carbide semiconductor based Tractions systems demonstrations on trains, wheel-motor demonstration on High-Speed Train, smart maintenance, virtual validation and eco-friendly Heating, Ventilation Air conditioning and cooling (HVAC) and research on battery and hydrogen-powered regional trains.

This proposal has been developed to tackle the three main challenges related to Traction systems, HVAC and future decarbonised trains highlighted in the call text:

- master technology breakthroughs, contributions to the implementation of new methodologies, tools, norms and standards;
- demonstrate environmentally-friendly HVAC; and
- improve the Shift2Rail Key Performance Indicators like Life Cycle Cost and reliability.

PINTA3 will continue and extend the development of the work, mainly in terms of manufacturing and validation of the prototypes solutions on trains (up to TRL7), which has been initiated within PINTA2 and PIVOT-2.

The same as PINTA2 high quality and experienced project coordination and management with defined roles will ensure successful, timely deliveries.

This proposal addresses the topic S2R-CFM-IP1-01-2020 on Traction and HVAC.

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)

Other programmes: S2R-CFM-IP1-01-2020 Demonstrators for the next generation of traction systems, smart maintenance, virtual validation and eco-friendly HVAC, and Technical research on battery and hydrogen powered regional trains (BEMU/ HMU) (IP1/IP3)

Lead Organisation:

Alstom Transport Sa

Address:

48 RUE ALBERT DHALENNE
93400 SAINT OUEN
France

Organisation Website:

<http://www.alstom.com>

EU Contribution: €2,280,722

Partner Organisations:**Deutsche Bahn Ag****Address:**

Postdamer Platz 2
10785 BERLIN
Germany

Organisation Website:

<http://www.deutschebahn.com>

EU Contribution: €419,193

Bombardier Transportation Sweden Ab**Address:**

OSTRA RINGVAGEN 2
721 73 VASTERAS
Sweden

Organisation Website:

<http://www.bombardier.com>

EU Contribution: €1,120,461

Caf Power & Automation SI**Address:**

PASEO MIKELETEGI 58/2 PARQUE TECNOLOGICO DE SAN SEBASTIAN
20009 DONOSTIA SAN SEBASTIAN
Spain

Organisation Website:

<http://www.cafpower.com>

EU Contribution: €1,987,817

Patentes Talgo SI**Address:**

Paseo Del Tren Talgo 2
28290 Las Rozas De Madrid
Spain

EU Contribution: €471,065

Siemens Mobility Gmbh**Address:**

OTTO-HAHN-RING 6
81379 MUNCHEN
Germany

EU Contribution: €1,399,392

Faiveley Transport Leipzig GmbH & Co. Kg**Address:**

INDUSTRIESTRASSE 60
04435 SCHKEUDITZ
Germany

EU Contribution: €169,839

Knorr Bremse Systeme Fr Schienenfahrzeuge GmbH**Address:**

Moosacher Strasse 80
401060 MUNCHEN
Germany

Organisation Website:

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

EU Contribution: €302,274

Sncf Voyageurs**Address:**

9 RUE JEAN PHILIPPE RAMEAU
93200 SAINT-DENIS
France

EU Contribution: €433,041

Technologies:

Electric vehicle batteries (and energy management)
Energy generation and harvesting solutions for rail

Development phase: Demonstration/prototyping/Pilot Production

HVAC

Highly-efficient heating system

Development phase: Demonstration/prototyping/Pilot Production

STRIA Roadmaps: Vehicle design and manufacturing

Transport mode: Rail transport

Transport sectors: Passenger transport, Freight transport

Transport policies:

Societal/Economic issues, Environmental/Emissions aspects, Safety/Security,
Decarbonisation

Geo-spatial type: Other