

PROJECT

PINTA2

IP1 Traction TDI and Brakes TD5 - Phase 2

Funding: European

Duration: Sep 2018 - Feb 2021

Status: Complete

Total project cost: €28,534,184

EU contribution: €12,680,591



Call for proposal: H2020-S2RJU-CFM-2018

[CORDIS RCN : 221599](#)

Objectives:

This proposal has been developed to tackle the two main challenges related to Traction systems and Adhesion highlighted in the Call text.

The traction sub-project will address these objectives as follows:

- Railway system LCC reduction. Traction system cost reduction by reduction in validation & certification cost via simplification, harmonization of rules and shifting/replacement of “on site” certification experiments by numerical simulation and/or static test bench tests.
- Operational reliability increases via higher reliability/availability of components. Progress on methodologies and tools in these fields, especially in WP4 & WP13, will be applied to new Traction systems developed within the project. The benefit will be a dramatic reduction in the number of In-service failures per million km;
- Train & Line capacity increase through weight, volume and noise savings of Traction equipment. These improvements will permit new train architectures to increase the number of seats and/or passengers' comfort.

The main specific objectives of adhesion management for brakes are:

- Improvement of braking degradation limit in poor adhesion condition
- Management of all adhesion conditions in a way that brake distances are optimized
- Improvement of the overall train safety for braking, which relies substantially on the management of the wheel/rail contact
- Reduction of wheel Life-Cycle-Costs (LCCs) through optimized wheel/rail contact in braking

Parent Programmes:

[Shift2Rail - Shift2Rail](#)

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

Funding type: Public (EU)

Lead Organisation:

Alstom Transport Sa

Address:

3 Avenue André Malraux
92300 LAVALLOIS-PERRET
France

Organisation Website:

<http://www.alstom.com>

Partner Organisations:

Bombardier Transportation Gmbh**Address:**

Schoneberger Ufer 1
10785 Berlin
Germany

Organisation Website:

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

Caf Signalling S.I**Address:**

Sepulveda 7
28108 Alcobendas
Spain

Deutsche Bahn Ag**Address:**

Postdamer Platz 2
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Organisation Website:

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Faiveley Transport Amiens**Address:**

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80000 Amiens
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Knorr Bremse Systeme Fr Schienenfahrzeuge Gmbh**Address:**

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Organisation Website:

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

Siemens Ag**Address:**

Wittelsbacherplatz 2
80333 MUENCHEN
Germany

Organisation Website:

<http://www.siemens.com>

Sncf**Address:**

2 Place Aux Etoiles

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France

Patentes Talgo SI

Address:

Paseo Del Tren Talgo 2
28290 Las Rozas De Madrid
Spain

Technologies:

Rail vehicle design
More efficient rail wagons

Development phase: Research/Invention

STRIA Roadmaps: Vehicle design and manufacturing, Infrastructure

Transport mode: Rail transport

Transport sectors: Passenger transport, Freight transport

Transport policies: Safety/Security

Geo-spatial type: Network corridors