



PORTUGAL RAILWAY SUMMIT 2021

CONFERENCE | FORUMS | DIGITAL EXHIBITION | B2B MEETING

2021
EUROPEAN
YEAR OF RAIL



2021PORTUGAL.EU

FORUM – INTERNATIONAL CLUSTER

Spanish Railways Technological Platform, PTFE

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Technical Secretariat:

FUNDACIÓN DE LOS
FERROCARRILES
ESPAÑOLES



Who is the Spanish Railways Technological Platform, PTFE

The PTFE is an industry-led tool at the service of the railway sector created in 2005 and supported by the Spanish Ministry of Research & Innovation. Its technical secretariat is performed by the Spanish Railways Foundation. The PTFE defines the “long term vision” and the “Strategic Research Agenda of the Railway Sector”, which is constantly being updated.

Technical Secretariat:



PTFE's mission is to align the strategies of the various agents, concentrate R&D and innovation efforts, and to reduce fragmentation in research fields in order to promote scientific and technological progress to ensure competitiveness, sustainability and growth of the Spanish railways.

www.ptferroviaria.es

The Spanish Railways Foundation (FFE) was constituted on 20th February 1985 by RENFE and FEVE as a public non-profit foundation.

The mission of the FFE is to promote the development of railway knowledge and usage through a range of activities: technical research and training; cultural services and regeneration of railway heritage. The FFE also runs the railway library, centre for historical archives and railway documentation, in addition to the Madrid Railway Museum and Cataluña. The trustees of the FFE are: Renfe, Adif, Metro Madrid, FGC, FGV, Euskotren, ETS, SFM, Puertos del Estado, CETREN, Redalsa, Turisfer.

PTFE Global framework – National scope



Goal: Recovery from COVID-19 crisis and restoration of a powerful national R&D system

Phase I
2021-2023

- Support of R&D within R&D medical field
- Environmentally friendly transition and digitalization.

Phase II
2024-2027

- Phase I analysis.
- Tackling strategic priorities, initiatives and actions established by the very same EECTI.

Alignment with EU and the Horizon Europe Programme priorities from an holistic vision **from the concept to the market**



Safety
Sustainability
Connectivity



Aligned with Sustainable Development Goals (ODS) and Agenda 2030

Political agenda in terms of R&D



Actions and support from the National Research Agency



PTFE Global framework – International scope

Horizon Europe 2021-2027



Horizon Europe structure: new Research framework programme

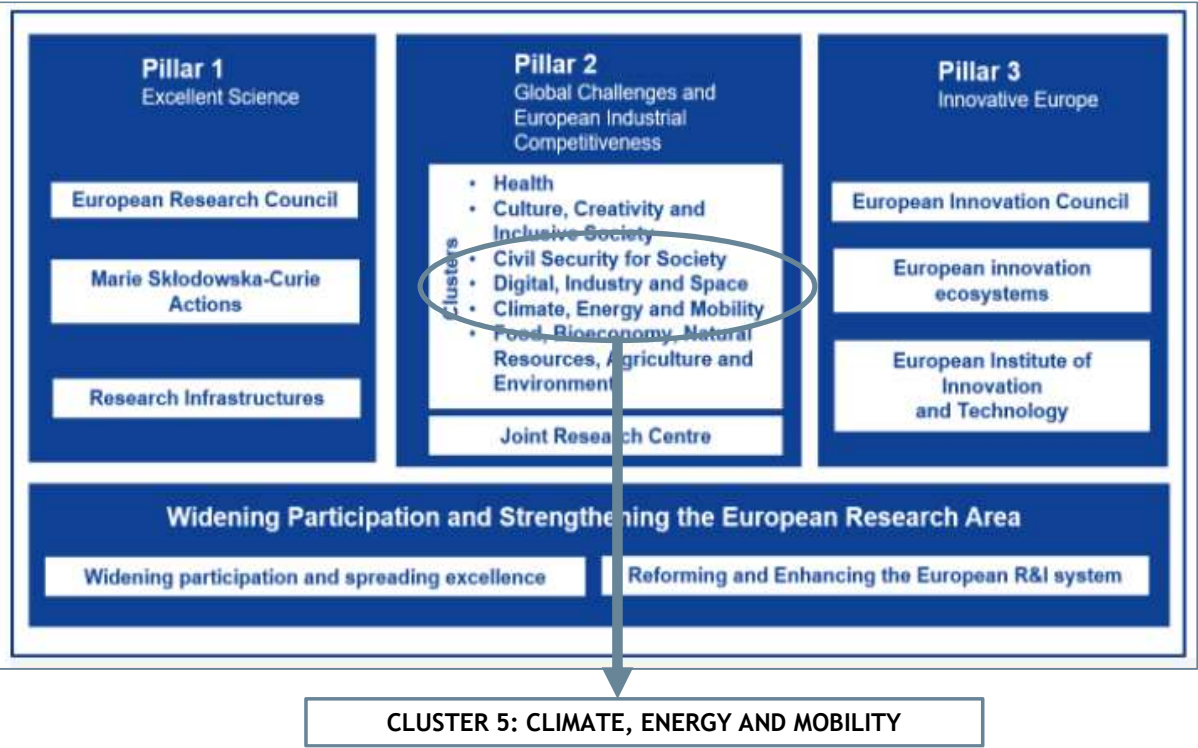


The European Green Deal sets an action plan and a EU politics foundation that aim to:

- Boost an efficient use of the resources thanks to evolving to a circular and clean economy:
- Restore the biodiversity and to reduce the pollution.

In order to achieve this goal, it will be necessary to act over all the fields of our economy:

- To invest on enviromentally-friendly technologies
- To support to the industry to boost the innovation
- To deploy pulic and private transport systems that are cleaner, more economical and healthier.
- Energy field decarbonisation
- To guarantee the energy efficiency in buildings
- To collaborate with international partners to improve worldwide environment standards.



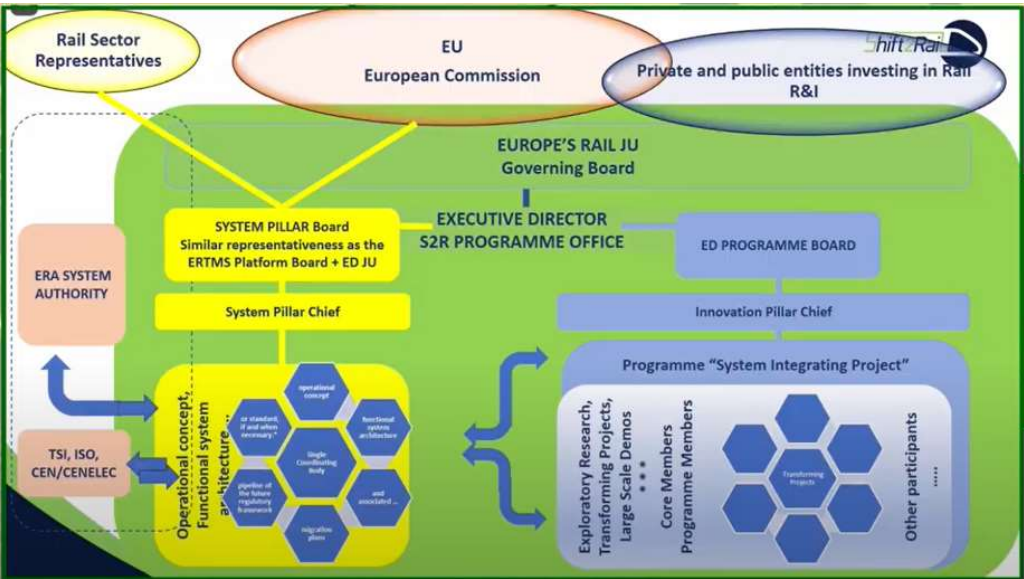
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Specific Green Deal call release, the biggest one within Horizon2020.

PTFE Global framework – International scope

Continuity of Shift2Rail JU: EUROPE'S RAIL JU

Foreseen Institutional Structure considering the Shift2Rail continuity. (25 candidates in the first step of the process).



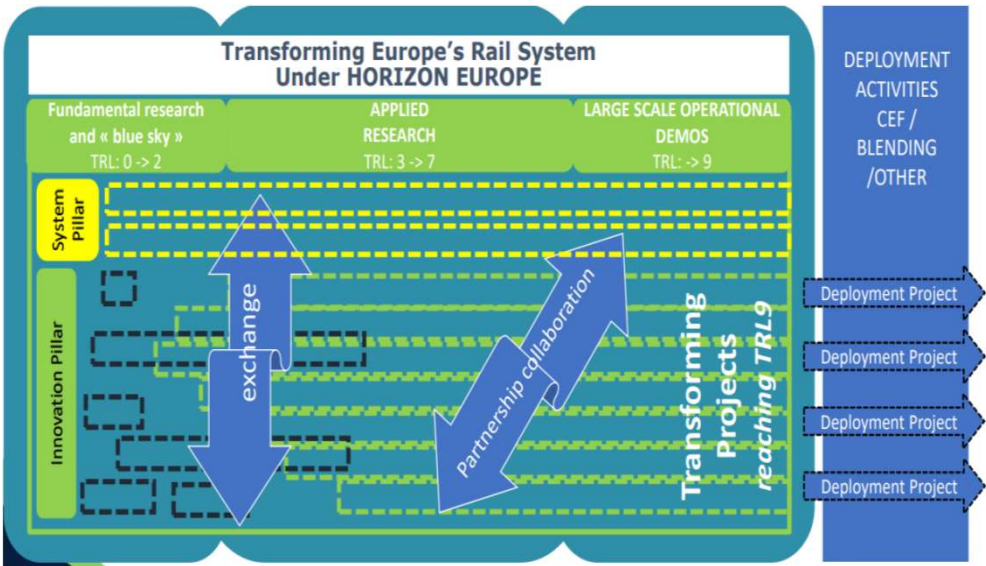
Source: S2R Programme Office

Initial start of the EUROPE'S RAIL JU:
third quarter 2021.

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S2R has changed the technical approach to Transforming projects (aligned with ERRAC's SRIA) from its initial structure of Innovation Pillars.



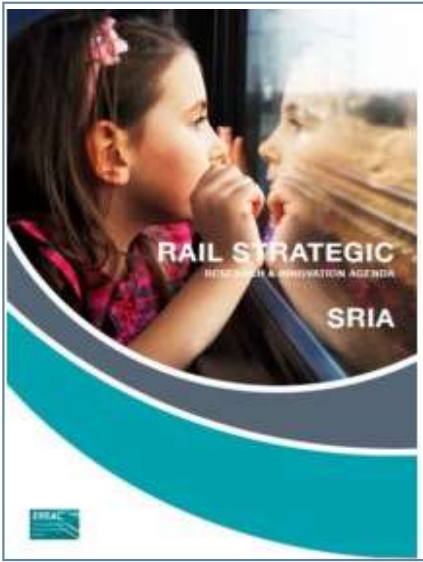
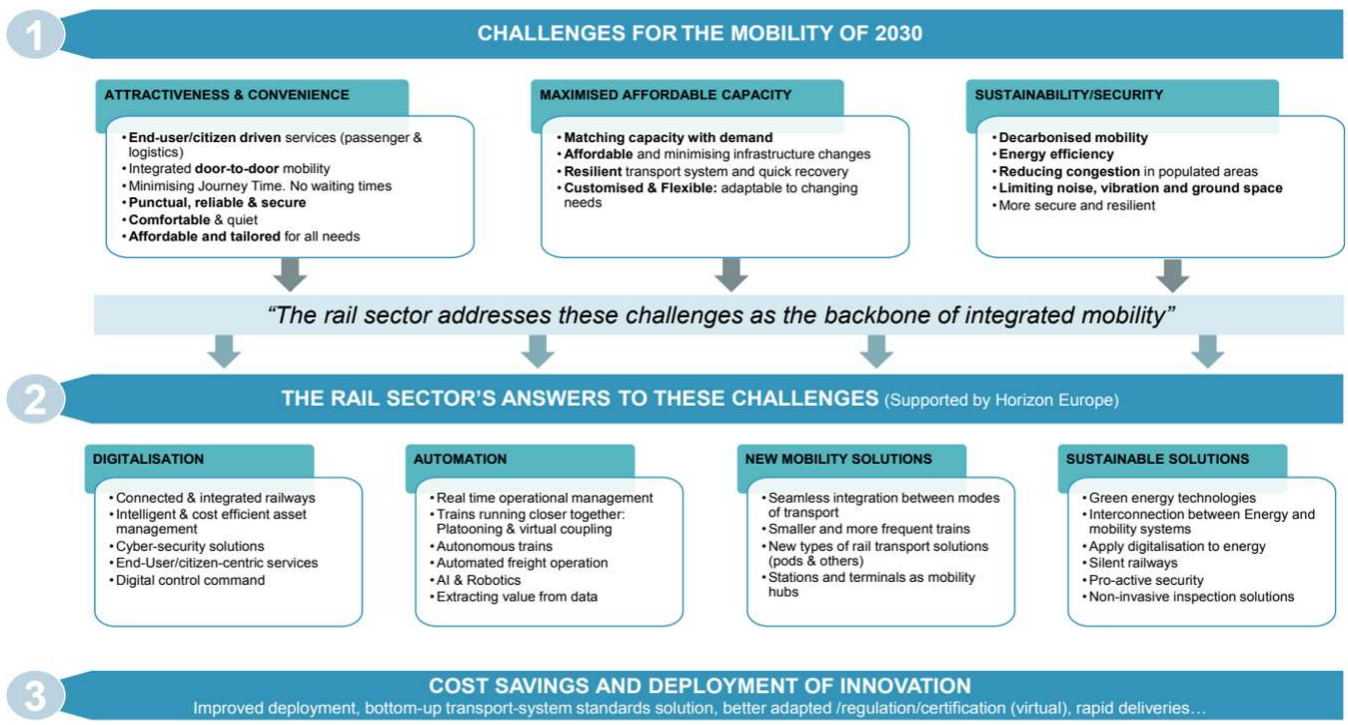
Source: S2R Programme Office

Innovation Pillar + System pillar: aims to cover from TRL0 to TRL 9.

PTFE Global framework – International scope

ERRAC

Rail 2030 - Research and innovation priorities:
Turning Railway into the backbone of sustainable mobility



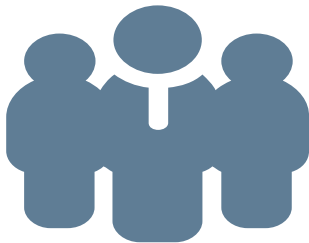
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Rail Strategic Research and Innovation Agenda (SRIA)
Key element considering the European research priorities definition within the Framework Programme and the continuity of the Shift2Rail program.

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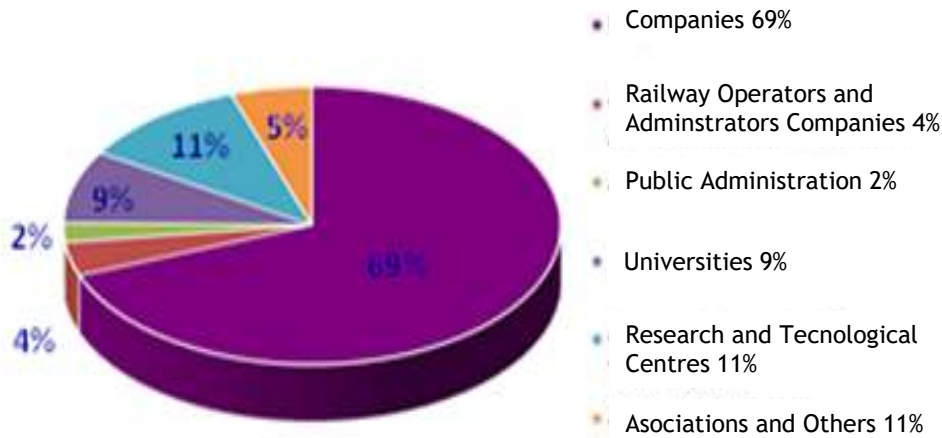
Who participates in the PTFE

Entities that shape the PTFE per Autonomous Communities (2020)

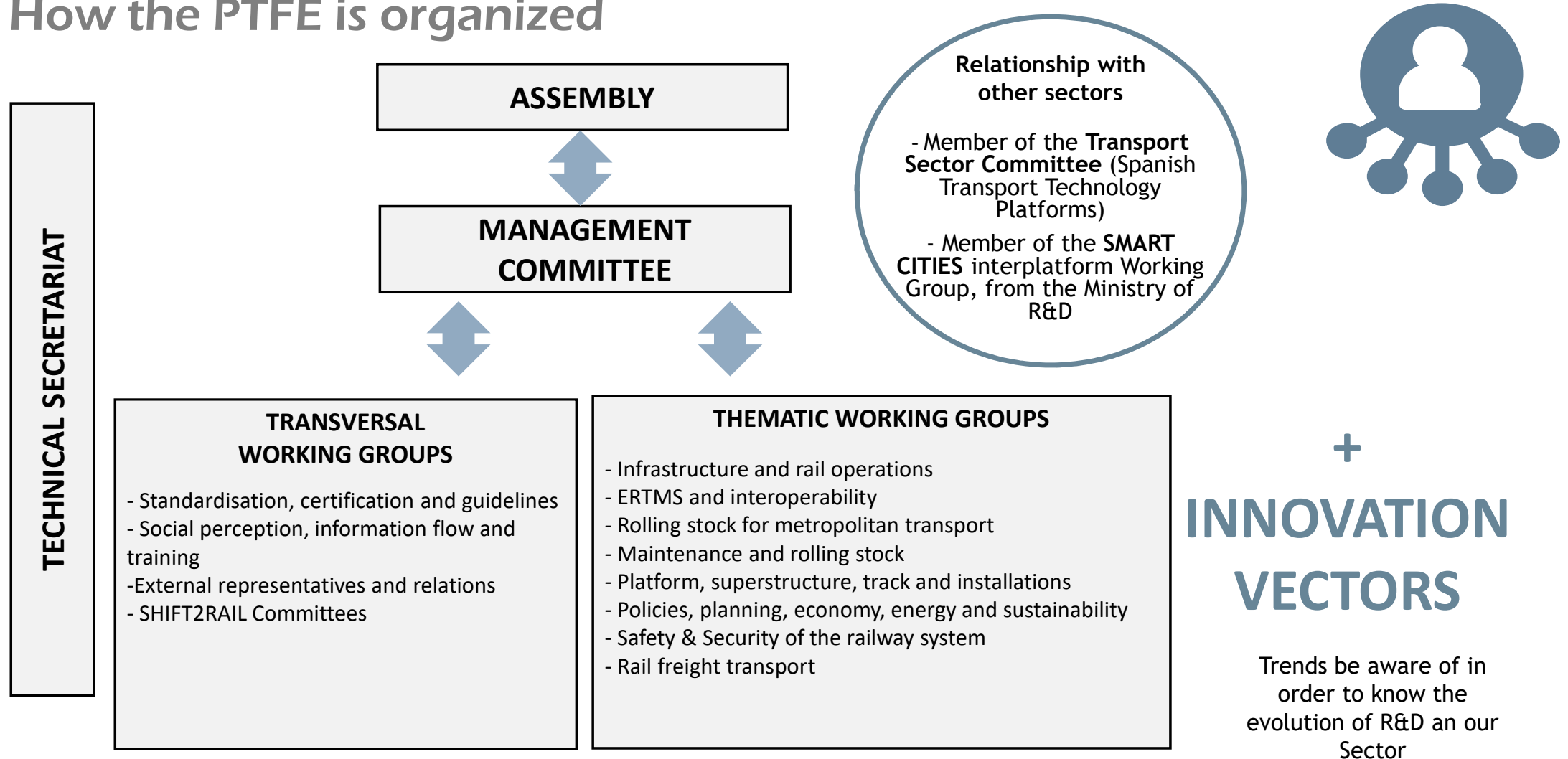


490 entities are part of the PTFE

% Entities of PTFE



How the PTFE is organized

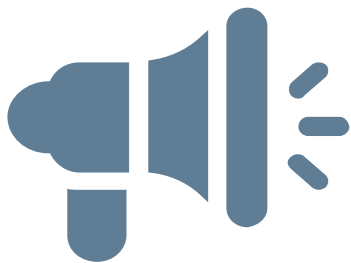


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PTFE Vision – Agenda – Innovation vectors



We design with the Sector the Agenda and technological and research priorities



We work in innovation vectors: Energy, Safety, Materials....

We support and disseminate R&D capacities of the sector; identifying who is who; as well as the scientific infrastructures for testing

PTFE Vision – Permanent Technological Surveillance



Monographic National Funding Programme
RETOS-COLABORACIÓN: calls 2014-2019



Monographic National Funding Programme
RETOS INVESTIGACIÓN : calls 2013 - 2019



Monographic CDTI PROJECTS: calls 2012 - 2019



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Available on the www.ptferroviaria.es

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PTFE Vision – Working on transversality and establishing alliances



Agreements and collaborations with other Spanish technological platforms:
Materials, building, aeronautics, hydrogen, road, energy, automotive components

Agreements and collaborations with other international technology platforms:
. Czech Railway Technology Platform
. Portuguese Technology Platform, PFP



Advanced materials for railway field

- It comes from the collaboration between PTFE and MATERPLAT (Nanomaterials and advanced materials platform).
- Its main goal is to boost the transfer of research, knowledge and technology on materials to railways.
- Internationally designed (ES-EN).
- Constantly updated documents.

Available on the www.ptferroviaria.es

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EU project. Promoting transversality



TER4RAIL Project - Shift2rail Coordination Support Action, IPX

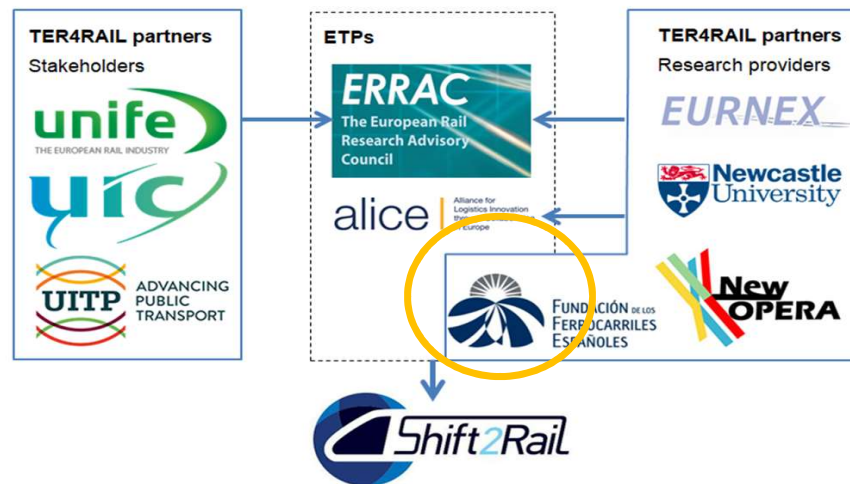
TER4RAIL goal: Coordination and Support Action (CSA) as a reference for the definition of the Evolution and Future of Railways.

<https://ter4rail.eu/>

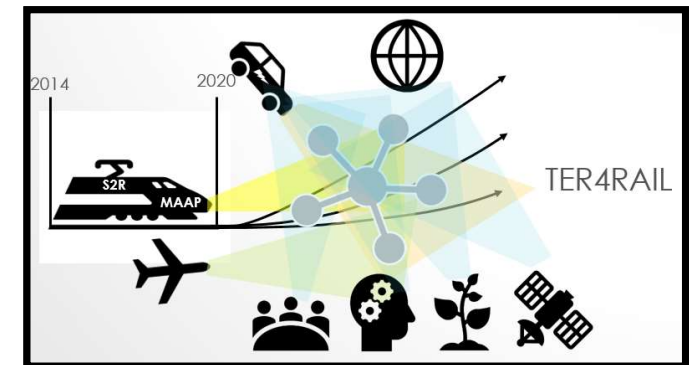
@Ter4Rail

TER4RAIL aims to explore several activities and cross-sectional abilities within or out of the railway field that may be result of interest to rail R&D, as well as the study of the rail roadmaps, generating pro-rail arguments.

To support **ERRAC** and **Shift2Rail**.



FFE plays the role of the **WP1 leader: Rail Innovative Research Observatory**. The aim is to promote dialogue and collaboration on cross-sectional abilities between the railway and other fields .

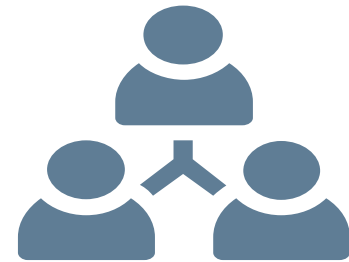


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PTFE Global activity

- Promoting the development of projects: creation of employment and innovative businesses.
- Supporting the development of consortiums.
- Technological supply and demand, facilitators of technological needs.
- Driving innovative markets.
- Partnership working.
- Networking.
- Support key stakeholders.
- Incubation of innovative market proposals.
- Development and revision of Strategic Research Agenda & innovation vectors.
- National and international sector positioning.
- Internationalisation, presence on forums. Defending R&D rail sector interests.
- Organizing technological forums, workshops, meetings...
- Collaboration agreements with other organisations.
- Working Groups activity.
- Other...



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PTFE – Technical Secretariat

- Bilateral meetings with companies, providing information and advice.
- Representation in national and international forums.
- Provision of letters of support and interest.
- Collaboration agreements.
- Elaboration and dissemination of strategic documents.
- Dissemination of national and international calls for proposals.
- Technological surveillance and development of projects.
- Surveys for the monitoring of indicators of the railway sector, treatment of the information, analysis and evaluation.
- Railway projects database.
- Technical secretariat specific activities:
 - Mailing with interesting information.
 - Maintenance of website contents.
 - Relationship with the Ministry of R&D.
 - Relationship with stakeholders.
 - Organisation of the assembly, management committee meetings, forums and other meetings.



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European Railway year 2021

The goal is to promote the railway as a sustainable, innovative and safe mode of transport, capable of guaranteeing essential services even in times of crisis. This European Year should also make possible to raise public awareness about the European cross-border dimension of transport Railway.

“The European Year of Rail 2021 will put rail transport’s many benefits in the spotlight, through dedicated events, exhibitions and promotional campaigns, reaching out to our citizens, in particular young people,”
Adina Vălean, Commissioner for Transport.

How it can be achieved?

- Necessity of coordinating the actions of the sector at the state and European level.
- Unification of communication actions, seminars, conferences, visits, etc. ... under the frame of the European Year of the Rail to boost the impact of the sector on society.

#EUYearofRail

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MITMA will promote the national program.



With the guidelines of MITMA, the Spanish Railways Foundation will coordinate the program with the collaboration of key agents in the railway Sector.



Thanks for your attention

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