

Consortium Members



IITF is an application-oriented research organisation and spin-off of TU Graz. Graz, Austria



Railistics is a professional consulting firm providing a wide range of services to the rail sector. Wiesbaden, Germany



UNIVERSIDAD DE CANTABRIA

The Transport Systems Research Group at University of Cantabria was set up in 2004 to adapt new technologies in rail. Santander, Spain



The S2R JU is a public-private partnership in the rail sector providing a platform for the rail sector as a whole to work together with a view to driving innovation.



This project has received funding from the European Union's Horizon 2020 Programme Research and Innovation action under grant agreement No 730838



**Future challenges
of the railway sector**

The project will help Shift2Rail to achieve their goals of cutting life-cycle cost up to 50%, doubling railway capacity and increasing reliability, punctuality by 50%.

It will further provide input regarding changes and additions to the Shift2Rail Shift2Rail Master Plan by highlighting different options for further development.

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**Future challenges
of the railway sector**

NEAR2050 will analyse and take into account issues such as developing technologies, new societal trends, and changing demographics among others, in order to obtain a full account of what users currently need and expect from the rail sector, and what they will need and expect from the rail sector in terms of mega-trend based scenarios in 2022, 2030 and 2050.

2022

2030

2050



The project will analyse the entire process that needs to be gone through by both passengers and freight. This will look at the door-to-door offers as well as what planning options exist for customers.



NEAR2050 looks at other mobility modes, determines their development with regards to the three time scenarios and with that assesses the type of cooperation that will be required and how this can be implemented. This includes interaction with busses, shared and private bikes, and shared and private cars. The analyses look at the opportunities of shared ticketing, booking, and pricing systems, and the availability of these mobility modes among others.

NEAR2050 will look at all aspects of rail transport including:

- Long-distance traffic
- High-speed traffic
- Regional passenger traffic
- Urban and suburban traffic
- Freight traffic

It will focus on the advancements that are expected to be made in the following areas:

- Rolling stock
- Power supply systems,
- Intelligent traffic management systems
- IT solutions
- Infrastructure design

Using future needs that will be elaborated over the course of this project, NEAR2050 will look at what solutions each of the actors can implement, determine how difficult this implementation will be, and will make recommendations in terms of implementation plans.

