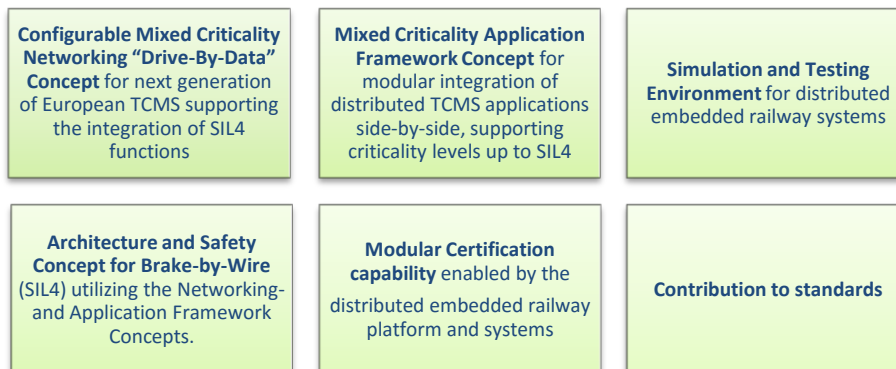


## ANNOUNCEMENT LETTER

**SAFE4RAIL: Safe architecture for Robust distributed Application Integration in rolling stock**

SAFE4RAIL, a European cooperative research project within the Shift2Rail H2020 Framework, started on the 1<sup>st</sup> October 2016, with a set duration of 24 months. **SAFE4RAIL** aims to create safety concepts for **mixed-critical ethernet-based networking** as well as a **mixed-criticality application framework**, including the **brake-by-wire concept**. SAFE4RAIL will reinforce European competitiveness by offering **fundamentally simplified electronic and Train Control and Monitoring architectures required for the optimization of railway systems**, to minimize system lifecycle and operational costs. The targeted outcome refers to the reduction of the number of on-board computing devices, improved reliability, shortening the integration and (re)commissioning times and thus Life-Cycle Cost reduction, as well as the ability to implement the SIL4 functions in **Train Control and Monitoring Systems**. As a whole our SAFE4RAIL research and development project is aiming at the following objectives:



The technologies and simulation framework developed, will fully support the execution of the implemented train functions. Moreover, this project targets additional economic and environmental impacts on the European industry and will bring better European technology into practical reality. Recognizing the importance of limited carbon footprint and energy efficiency for environmental reasons, SAFE4RAIL will result in better and more sustainable trains.

SAFE4RAIL results will encourage interoperability, efficiency, safety and secure interconnection of technical solutions among European railway providers, boosting the worldwide competitiveness and preserving the global leadership of the European transport industry.



This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 730830. This Joint Undertaking receives support from the European Union’s Horizon 2020 research and innovation programme and Austria, Spain, Germany, Czech Republic, Italy, France”.

SAFE4RAIL is driven by an European cross-industry consortium of 11 academic and industrial partners (including 4 SMEs), with experts from the automotive, aerospace, and railway sector to harvest synergies with existing and emerging concepts and technologies.

- TTTECH COMPUTERTECHNIK AG Austria
- IKERLAN SCL Spain
- UNIVERSITAET SIEGEN SIE Germany
- TECHNIKON FORSCHUNGS- UND PLANUNGSGESELLSCHAFT mbH Austria
- UNICONTROLS A.S. UNI Czech Republic
- NewTec GmbH System-Entwicklung und Beratung, Germany
- TÜV SÜD Rail GmbH, Germany
- Eletech S.r.l. - Innovation in electronics, Italy
- INGENIEURGESELLSCHAFT FUER AUTO UND VERKEHR GMBH Germany
- INSTITUT FRANCAIS DES SCIENCES ET TECHNOLOGIES DES TRANSPORTS, DE
- L'AMENAGEMENT ET DES RESEAUX, France
- NIER Ingegneria SPA, Italy

For more information visit: [www.safe4rail.eu](http://www.safe4rail.eu) (will be available soon)

Contact information:

**Project coordinator & technical lead:**

Arjan Geven  
TTTech Computertechnik AG

Schönbrunner Straße 7  
1040 Vienna  
Austria

Email: [arjan.geven@tttech.com](mailto:arjan.geven@tttech.com)

**Contact person at Technikon:**

Dr. Martin Deutschmann  
TECHNIKON Forschungs- und Planungsgesellschaft mbH

Burgplatz 3a  
9500 Villach  
Austria

Email: [technikon@safe4rail.eu](mailto:technikon@safe4rail.eu)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 730830. This Joint Undertaking receives support from the European Union's Horizon 2020 research and innovation programme and Austria, Spain, Germany, Czech Republic, Italy, France".