



## MORANE-2 JOINT UIC-UNIFE PRESS RELEASE

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### **Transforming European rail: EU-Rail and SNS JUs project unites railways, industry and stakeholders for future-proof FRMCS**

(Paris / Brussels, 28 January 2025), The landmark FP2-MORANE-2 project is now underway, which will test Future Railway Mobile Communication System (FRMCS) technology under real conditions and demonstrate Europe's commitment to achieving sustainable, efficient and competitive rail transport.

This innovative project is an essential component of the European Rail Traffic Management System (ERTMS), which aims to increase capacity, enhance digitalisation and boost the competitiveness of passenger and freight rail transport in the European Union.

The 34-month major project will test and foster market-ready specifications for signalling technology across Europe's busiest railway lines, ensuring that these specifications are ready to be incorporated in future revisions of Technical Specifications for Interoperability (TSIs).

As part of the project, the FP2-MORANE-2 prototypes will be tested in three European laboratories and under real track conditions, including on both conventional and high-speed lines.

With the impending obsolescence of the Global System for Mobile Communications – Railway (GSM-R) by 2030, the new FRMCS system will create many opportunities, standing as a priority technology for the future railway system.

The Horizon Europe FP2-MORANE-2 project, co-funded to €13.5M by Europe's Rail (EU-RAIL) and the European Smart Networks and Services Joint Undertakings (SNS JUs), officially began on 1 December 2024. It consists of six Work Packages, designed to validate the latest version of the FRMCS specifications by the European Union Agency for Railways (ERA).

Through its comprehensive testing of FRMCS functions and systems, the project represents an essential step towards achieving market-ready specifications, which will be incorporated in the new version of the Control Command and Signalling TSI (CCS TSI) in 2027.

FRMCS will support existing applications such as ETCS and voice, while also enabling new services including ATO GoA1/2/3/4, data and video services, and other essential telecom applications requiring enhanced quality, flexibility and capacity.

This innovation is vital for creating a competitive and sustainable future transport mode. UIC, as FP2-MORANE-2 Project Coordinator, is leading the consortium composed of UNIFE (representing the European Rail Supply Industry), various railways (ADIF, BaneDanmark,

Bane Nor, Deutsche Bahn, Infrabel, Network Rail, ProRail, RFI, SBB, Trafikverket and Vöylävirasto), European rail suppliers (Alstom, CAF, Ericsson, Eviden, Frequentis, Funkwerk, Hitachi Rail GTS, Kontron, Nokia, RideOn Track, Siemens, Teltronic and Viavi Solutions) and two mobile network operators (KPN and Telia).

FP2-MORANE-2 will also establish close cooperation with rail regulatory and standardisation bodies, particularly ERA. Cooperation will extend to other EU-Rail projects and initiatives, ensuring alignment and integration across the sector.

**François Davenne, UIC Director General**, underlined: *“The FP2-MORANE-2 project represents a turning point for European railways, demonstrating our collective commitment to innovation and sustainability. By advancing FRMCS, we are not only ensuring seamless communication across the rail network but also supporting the EU’s vision of a greener and more efficient transport system. This project showcases the power of collaboration in shaping the future of rail transport, setting the stage for a new era of digital and sustainable mobility.”*

**Enno Wiebe, Director General of UNIFE**, highlighted: *“The European rail supply industry is devoted to making FRMCS, as part of the overarching ERTMS rollout, a full success. All actors must collectively ensure that the transition to FRMCS is timely and as seamless as possible. FP2-MORANE-2 will contribute to the delivery of the FRMCS specifications for the new CCS TSI. This project will support the development of FRMCS technologies, and aims to produce the first deployable FRMCS commercial solutions soon after the completion of testing and evaluation. Ongoing investment in research programmes like this one will allow passenger and rail freight to reap the benefits, while also laying down a future path for broader innovations in a host of other rail products and fostering the envisioned completion of the TEN-T network.”*



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**UIC** is the worldwide organisation for the promotion of rail transport at a global level and for the collaborative development of the railway system. It brings together more than 200 members across all 5 continents, and includes rail operators, infrastructure managers, railway service providers and more. UIC maintains close links with all stakeholders in the rail transport sector around the world, including manufacturers, railway associations and public authorities, as well as with other domains and sectors whose experiences may be beneficial to rail development. UIC’s main missions include understanding

*the business needs of the rail community, developing innovative programmes to identify solutions to these needs, and preparing and publishing documents such as reports, specifications and guidelines that facilitate the implementation of innovative railway solutions. For more information, please visit [www.uic.org](http://www.uic.org) or follow @uic on LinkedIn.*

**UNIFE** represents the European Rail Supply Industry, gathering over 120 of Europe's leading large and SME companies active in the design, manufacture, maintenance and refurbishment of rail transport systems, subsystems and related equipment. UNIFE advocates its members' interests at both the European and International level – actively promoting EU rail equipment and standards within Europe and abroad. For more information, please visit [www.unife.org](http://www.unife.org) or follow [@unife on X](#) and [LinkedIn](#).