

UNIFE – The future of rail Innovate with the EU Rail Supply Industry

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WWW.UNIFE.ORG



About UNIFE

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- UNIFE represents the European Rail Supply Industry (rolling stock, infrastructure, energy and signalling sub-systems)
- UNIFE is a trusted partner of European and international institutions in all matters related to rail transport
- 100 full members of the largest and small and medium-sized companies in the rail supply sector and 16 associated members including 14 National Associations, representing almost 1000 suppliers of railway equipment



World leaders:

UNIFE members have a 84% market share in Europe and supply 46% of the worldwide rail production

About UNIFE



UNIFE Members

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TELESTE

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SCHALTBAU

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Associate Members













UNISIG



A strategic industry for the European economy

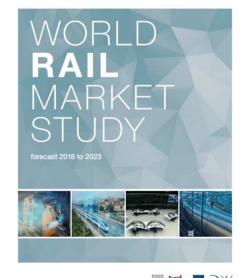












UNIFE World Rail Market Study 2018















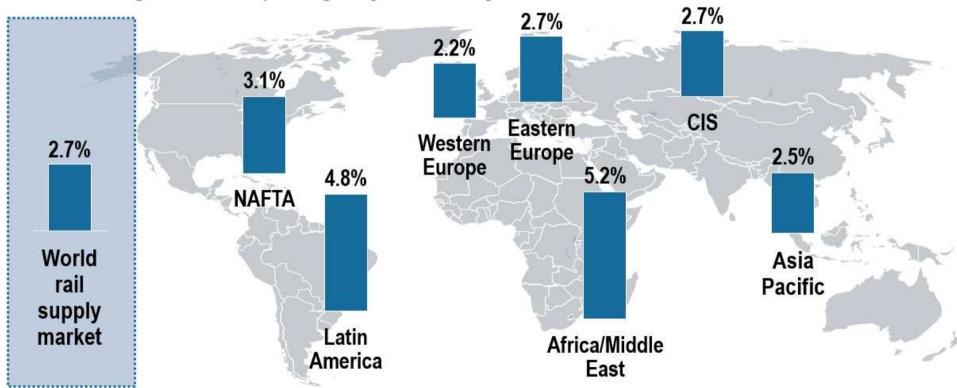


UNIFE WRMS 2018



All regions predicted to grow – Africa/Middle East and Latin America are expected to show strongest growth rates

Total market growth rates per region [CAGR1), %]



¹⁾ Compound annual growth rate 2021-2023 vs. 2015-2017

UNIFE WRMS 2018



Growth is driven by both the **advantages** of railway transport and major **trends**

Advantages of railway transport as a means of sustainable mobility



- > Greenest transportation mode
- > Best safety record
- > Driver of economic growth
- > "Productive" travel time for customers, comfort
- > Easy access for whole population
- > High capacity

Main trends driving the growth of the rail supply industry



- > Megatrends (Security, Sustainability, Urbanization, Globalization, etc.)
- > Fundamental transformation due to digitalization, AI
- > Increased private financing
- > Standardization and localization
- > Liberalization of rail operators
- > E-mobility



The European Rail Supply Industry Vision aligned... with the European Rail Sector Vision



Rail supply industry's view on Research and Innovation

Evolution of existing modes & pressure of new mobility concepts contribute to setting-up a **connected** and **integrated** mobility landscape

The concept of <u>seamless co-modality</u> is becoming key to answer economy's & society's mobility drivers

Rail transport is already bringing many <u>benefits</u> notably in terms of capacity, low carbon footprint, comfort and safety



<u>Research and Innovation</u> is of paramount importance to implement this new vision with Rail as the <u>backbone of the</u> mobility of tomorrow.



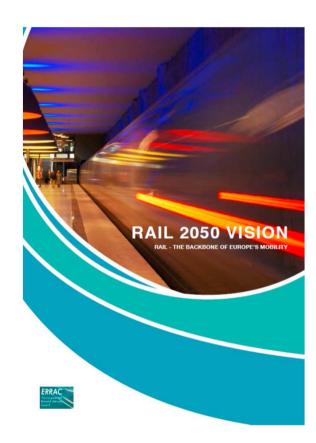


The ERRAC Rail 2050 vision in a nutshell

ERRAC 2050 Vision in a nutshell

"In 2050, rail transport in Europe is the backbone of an intermodal "Mobility as a Service" in cities and outside for both passengers and goods, meeting the needs of EU citizens and society. The suppliers and service organisations of the European rail industry are seen as the world's thought leaders for railway products and services."

http://errac.org/





Innovate with the EU Rail Supply Industry to build up the future rail transport system and transform the existing one



An industry committed to research & innovation

- The world leadership of the export-oriented rail industry is also due to its Research/Development/Innovation (RDI) capacities.
- Innovation is in the DNA of the European rail supply industry, which currently invests 3.6% of its annual turnover in RDI and has developed innovations such as high-speed trains, ERTMS (European Rail Traffic Management Systems) and automated metro systems
- Shift2Rail: A public-private Joint Undertaking of €920 Million (50% financed by the EU, 50% financed by the European Rail Supply Industry) for the period 2014-2020 to increase attractiveness and competitiveness of rail transport
- **Shift2Rail Members**: EU Manufacturers, Railway Undertakings, academia and research institutes









The UNIFE 9 Key Enablers

- 1. Automated rail transport
- 2. Mobility as a seamless service
- 3. Digitalisation
- 4. Towards an efficient Zero Emission Railway
- 5. Maintenance of the future
- 6. Enhancing the security and the protection of the rail system
- 7. Optimized infrastructure
- 8. Digitization of the supply chain (Industry 4.0)
- 9. New certification framework





European Rail Supply Industry's feedbacks on Shift2Rail

Shift2Rail:

- Breakthrough for Rail R&I: for the first time, **continuity and stability** of the whole rail sector's innovation efforts is fully ensured.
- Long term **budget stability**, over 7 years : commitment to reach the demonstration objectives;
- It is a great **platform for cooperation**: high value added of having railway undertakings, infrastructure managers and manufacturers within same projects;
- It will enable to illustrate **proof of concept** (through demonstrators including high-speed) for policy dossiers;
- **SMEs** participation fairly high.





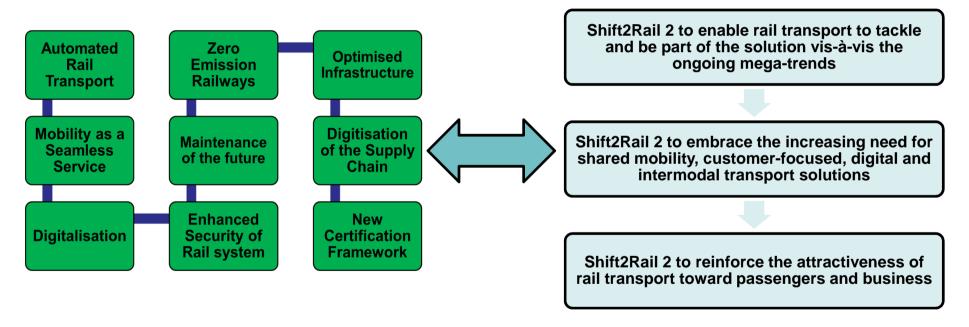




From Shift2Rail to Shift2Rail 2

- ➤ UNIFE strongly calls for the continuation of the Shift2Rail Joint Undertaking within the next Research and Innovation framework programme Horizon Europe 2021 2027.
- ➤ UNIFE's nine key-enables shall be at the core of Shif2Rail 2 objectives

The European rail supply industry's vision for Shift2Rail 2





Digitalisation: a priority for the EU Rail Supply Industry



Rail transport and the Digital transformation

- For the rail sector, the digital transformation is both a challenge and an opportunity:
 - The deployment of IT and enabling technologies in rail is, in several cases, still at an early stage.
 - Other modes of transport are pushing on their technological progress.
 - Digitalisation, not merely as an objective, but rather as a mean to achieve more ambitious and paramount goals.

Transport at the edge of great changes pushed by technology and ICT developments

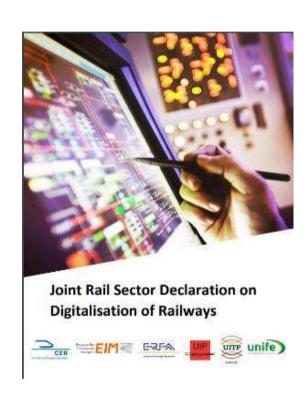
Mobility patterns and customers' expectations increasingly influenced by Digital Technologies

Roles have been transformed and new business models have been created



UNIFE's view on the digitalisation of Railways

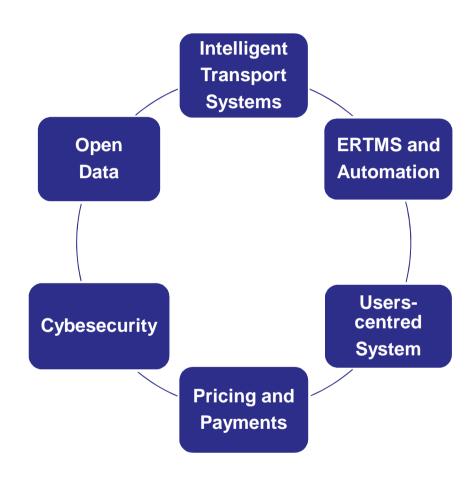
- A cooperative approach by all stakeholders is essential to reach the digitalisation of the railway sector in Europe.
- A permanent dialogue between sector stakeholders and decision makers is needed
- EU institution should strongly support the digitalisation of the railways.
- Legislation and regulation at the EU level should be supporting the digital transformation of the transport sector, while also providing the necessary safeguards and funding for its achievement
 - UNIFE is committed to engage with the European Commission to build a clear roadmap on Digitalisation.
 - ➤ UNIFE has been calling on the EU institution to support the establishment of a sector platform for digitalisation.





The European rail supply industry's Digital Priorities

- UNIFE's Digitalisation Platform is open to all UNIFE's Members who are willing to feed the current & future debates on digitalisation of the rail transport:
 - In September 2016, UNIFE publishes its "vision" on the digitalisation of the European railways.
 - Six major digital trends which the rail sector shall master are highlighted.
 - A new Vision Paper is being prepared for 2019, also in view of the negotiations on the EU budget – i.e. CEF; Digital Europe Programme.





Want to know more about UNIFE?

> Read our « *About UNIFE* » guide



> Consult our website: www.unife.org

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