



EU-Funded Rail Research—An Industry Point of View

Promoting Rail R&D for a more competitive mode and industry

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European Rail Research and Innovation Conference
18 March 2015, Prague**

UNIFE represents the European Rail (Supply) Industry

- Based in Brussels since 1992
- 24 permanent employees
- A trusted partner of the **European institutions** in all matters related to rail and transport
- **Full members: 75** of the largest and medium-sized companies in the rail supply sector
- **Associated members: 15** National Associations, representing almost 1,000 suppliers of railway equipment + EFRTC and UNISIG
- UNIFE members have an **84% market share in Europe** and supply and around **46% of the worldwide production** of rail equipment and services.





Our Members



74 Full Members

17 Associate members, incl. 15 National Associations

■ Ensuring adequate EU investment for Rail Infrastructure

- EU funds (European Fund for Strategic Investment, Connecting Europe Facility Funds, Cohesion Funds)

■ Enabling fair market access to EU rail industry abroad

- Free Trade Agreements/Industrial dialogues (e.g. Japan, US, Canada, China)

■ Simplified Rolling Stock Authorisation

- Fourth Railway Package

■ Promotion and Deployment of Interoperable Rail Systems throughout the EU

- ERTMS

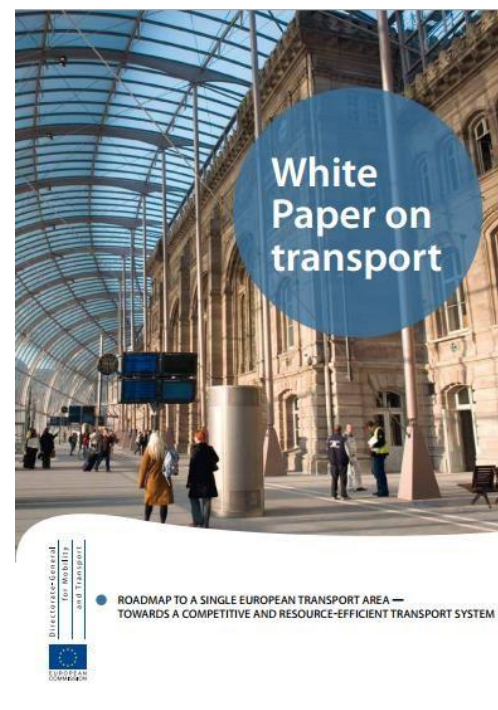
■ Ensuring Adequate Funding for Rail Research Projects

- Horizon 2020
- Shift2Rail



European Transport Commissioner Violeta Bulc

- **The Transport White Paper, published by the European Commission in 2011, outlined the vision for EU transport policy for the next ten years including perspectives up to 2050.**
- **In particular, the document emphasised the role of rail in meeting its targets for the decarbonisation of the transport sector and the establishment of a single European transport area.**



- 30% of road freight over 300 km should shift to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050, facilitated by efficient and green freight corridors. To meet this goal will also require appropriate infrastructure to be developed.
- By 2050, complete a European high-speed rail network. Triple the length of the existing high-speed rail network by 2030 and maintain a dense railway network in all Member States. By 2050 the majority of medium-distance passenger transport should go by rail.

- **Technical Pillar of the Fourth Railway Package is very important for the rail supply industry**
- **The Technical Pillar will speed up authorisation and make it less costly, the savings of which can be invested into R&D and passed on to customers and end users.**



- **Connecting Europe Facility (CEF):** provides EU financial aid to support projects in the transport, energy and telecommunication infrastructure. The **EU has allocated €26,2 billion to transport for 2014-2020**. Much of these funds are targeted to develop the TEN-T Corridor network.
- **The European Fund for Strategic Investments (EFSI) a.k.a. the “Juncker Investment Plan”**
- **Cohesion Funds:** the EU has provided several billion Euros for investment in transport infrastructure of economically less developed EU Member States

- **UNIFE is very active in the promotion of ERTMS and advocating its deployment throughout the EU to allow for a more interoperable, cross-border European rail network**

- **The European Commission's proposed "ERTMS Breakthrough Program": A set of short term actions to be performed by the end of 2016. The main objective of this program is to speed up the deployment of ERTMS**

- **Key priorities of the Breakthrough Program:**
 - "Users first" approach
 - "Running everywhere in Europe" → interoperable "on-board equipment" on ERTMS compliant infrastructure
 - Maintenance of the specifications and of the CCS TSI
 - Cleaning up of national rules
 - Cost and time reduction (certification, authorisation)



- **Involvement in ERRAC:**
 - Discussion with ERRAC partners about the ERRAC future challenges
 - Follow-up of the Foster Rail project → Project supporting ERRAC activities
 - Preparation of the new ERRAC Roadmaps (activity included in the Foster Rail project)

- **The Strategic Rail Research and Innovation Agenda** was published by ERRAC last year and outlines the sector's vision for rail R&D in the coming decades



STRATEGIC RAIL RESEARCH AND INNOVATION AGENDA

*A step change
in rail research and innovation*



- UNIFE both coordinates and is involved in many European Research projects (Rolling Stock, Signalling, Infrastructure, Energy, Freight, Safety and Security)
- Research and Innovation is a key priority for UNIFE and its members.
- Examples of research projects:



- The Shift2Rail journey started in 2009 when key European Rail sector players, began investigating a policy instrument that could facilitate a step change for the European rail system
- Under the coordination of UNIFE, interested players from the entire rail supply chain, but also from wider sector expertise, joined the preparation phase on a voluntary basis and contributed to the strong foundation of this PPP:
 - 25 major rail stakeholders signatories of the Shift2Rail MoU.
 - More than 60 additional companies – be they industrial partners, railway undertakings, urban operators or infrastructure managers – also joined the initiative by bringing their expertise.
 - More than 45 Universities and Research Centres also actively participated in the preparatory phase.
- **Czech companies (such as OLTIS, AZD, and SKODA)** were instrumental promoters of this initiative, and the **Czech government was very supportive** of Shift2Rail in the European Council.

- **17 June 2014: Publication in the Official Journal of the EU of the European Regulation officially launching a new and ambitious European Research & Innovation Programme that aims to:**
 - increase the competitiveness of the EU rail industry to help it retain world leadership
 - increase the attractiveness of rail transport
 - support the completion of the Single European Railway Area

- **A public-private Joint Undertaking under Horizon 2020**

- **A budget of 920 Million Euros for 2014-2020**, including 450 Million from the EU and 470 Million from the Industry

- **Key role of UNIFE which, over four years, coordinated the work of the rail sector during the technical preparatory phase. The EC is now in charge of the set up of the Joint Undertaking.**





- Coordinator: **UNIFE**
- Budget: **16M€**
- Sub-system: **Rolling Stock – link with Shift2Rail IP1**
- Objective: The ROLL²RAIL project aims to develop key technologies and to remove already identified blocking points for radical innovation in the field of railway vehicles, as part of a longer term strategy to revolutionise rolling stock for the future.



- Coordinator: **UNIFE**
- Budget: **12M€**
- Sub-systems: **IT – Telecommunication – link with Shift2Rail IP4**
- Objective: The IT²RAIL project aims at providing a new seamless travel experience, giving access to a complete multimodal travel offer which connects the first and last mile to long distance journeys.



- Coordinator: Network Rail
- **UNIFE is member of the consortium**
- Budget: **18M€**
- Sub-systems: **Infrastructure, Energy and Signaling– link with Shift2Rail IP2 and IP3**
- Objective: IN²RAIL is to set the foundations for a resilient, consistent, cost-efficient, high capacity European network by delivering important building blocks that unlock the innovation potential that exists in Shift2Rail

- In addition to the technologies developed in past EU Rail R&D projects and foreseen for development in the Shift2Rail master plan, there is still a lot to do to make railways more attractive as a mode in order to reach the EC's modal shift targets and environmental goals, as well as reducing congestion in the European transport system
- UNIFE encourages the EU institutions and the broader rail sector to push for a quick start to Shift2Rail in addition to **investigating extra funding for rail research within and outside of Shift2Rail** to make both the rail mode and rail industry more competitive.

Passenger vision for 2050 (pkm*10')

