ERTMS Status and Outlook - View of the supply industry

ERA ERTMS conference 2024

Dr. Klaus Mindel

System Integrators

Rolling Stock and Subsystems

Infrastructure and Energy

Signalling & Telecommunications

Railway Engineering

unife
THE EUROPEAN RAIL INDUSTRY

We gather

100+

Europe's leading rail supply companies

13

National associations

Making up

84%

of the European market

46%

of the global market

"**Promoting Rail Market Growth for Sustainable Mobility**"

01

Promoting European policies and programmes favourable to rail

02

Working towards an interoperable and efficient European railway system

03

Ensuring European Rail Supply Industry leadership through advanced research, innovation and quality

04

Providing UNIFE Members with strategic and operational knowledge

unife
THE EUROPEAN RAIL INDUSTRY

Brussels

UNIFE priorities related to ERTMS

Enactment of an Ambitious Budget:

Achieve **defined objectives and prioritize major initiatives** like ERTMS, DAC, and FRMCS deployment.

European Commission's Call to Action:

Ensure substantial augmentation of **CEF funds to support interoperable technologies**: ERTMS, FRMCS, and DAC.

Call upon the European Commission and Member States to **intensify efforts for full ERTMS deployment** across the entire TEN-T Network by 2040

ERTMS deployment:

Accelerate ERTMS deployment with a **clear migration roadmap** and substantial European financing support.

Technological Advancements in Rail

From ERTMS signaling to DAC in freight services, **embrace digitalization and AI integration**.
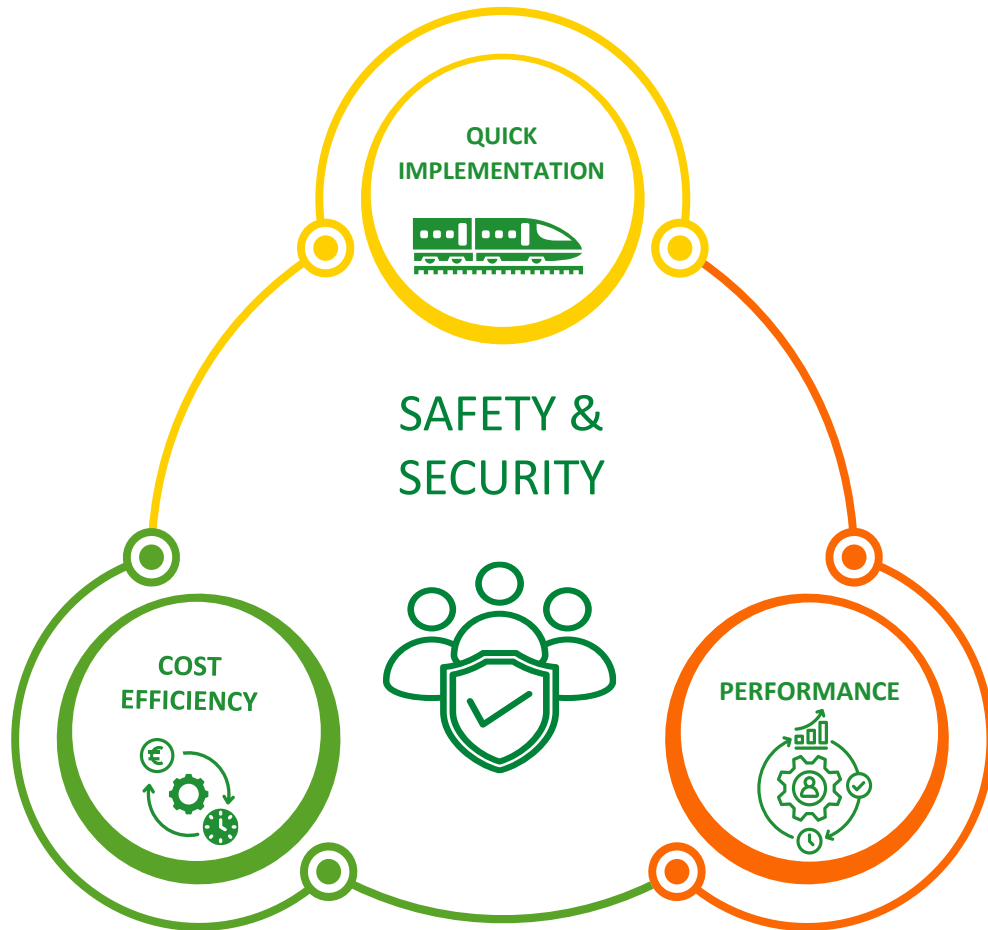
Europe's Rail Joint Undertaking:

Continue collaborating to **enhance European rail transport** in terms of capacity, reliability and efficiency through ERTMS.

On the move to a net-zero EU:

The European Rail Supply Industry priorities for 2024-2029

March 2024

https://www.unife.org/wp-content/uploads/2024/03/UNIFE_Priorities_2024-2029.pdf

Common Business Objectives

QUICK
IMPLEMENTATION

SAFETY &
SECURITY

COST
EFFICIENCY

PERFORMANCE

▶ A fundamental objective:

    ▶ Achieve appropriate level of safety & security

▶ These objectives are linked and have to be addressed in combination:

    ▶ Increased cost efficiency
    ▶ Higher performance of railway system
    ▶ Quicker rollout of solutions

The railway sector will only benefit substantially, if we implement more cost efficient and high performance solutions quicker.

unife
THE EUROPEAN RAIL INDUSTRY

Common Business Objectives – Where are we?

Objectives

Appropriate level of safety & security?

Where we are

- Safety targets achieved, efficiency to be improved
- Security addressed

Performance of railway system?

- Good progress,
  further improvements under development

Cost efficiency?

- Sector approach needed

Quicker rollout of solutions?

- measures needed to accelerate rollout of ERTMS
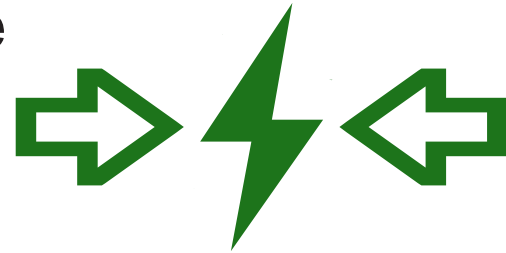
How to improve cost efficiency and accelerate rollout

► Focus on requirements

  ► Technical: abstain from project specific and national requirements

  ► Operational: develop harmonised operational rules for Europe

    ► The elimination of trackside signals and use of cab signalling enable the implementation of harmonised operational rules

  ► Regulatory: simplify authorisation process

These measures will have a substantial positive impact on cost efficiency and implementation speed.

Harmonised Operation – why & how to implement

Differences in operation are the main reason for complexity and cost

Implementation of harmonized operational rules is a challenge

Pure cab signaling is the enabler for the implementation of harmonized operational rules

Operational harmonisation – why it is key

▶ Today, around 100 requirement baselines for signalling systems in Europe leading to high cost and market fragmentation

▶ Without harmonised operational requirements, new features like ATO, moving block etc. will multiply the number of requirement baselines

▶ Consequently complexity and cost of solutions will increase disproportionately

▶ The System Pillar of the ERJU is working on the definition of harmonised operational requirements for signalling applications

Condition for success: move towards a European railway system with the implementation of harmonized operational rules

See you soon

THANK YOU

www.unife.org

@UNIFE

UNIFE - The European Rail
Supply Industry Association

unife

THE EUROPEAN RAIL INDUSTRY