

ERRAC

European Rail Research Advisory Council

Research and Development for the Railway Sector in the European Union

TRA Webinar, 19.5.2022

What is ERRAC?

- **The European Technology Platform for Rail** – Founded in 2001
- Promotes the **Holistic vision of the Rail System with all Stakeholders**
- Aims to **revitalize the European Rail Sector**
- **Identifies business needs and innovates to make rail attractive and more competitive**
- **Fosters and guides research efforts at European level**
- Gathers **representatives from all the major European rail research stakeholders:**
 - **Operators**
 - **Manufacturers**
 - **EU Member States**
 - **User's Groups**
 - **Infrastructure Managers**
 - **European Commission**
 - **EURail**
 - **Academia**

ERRAC **covers all segments of rail transport:** From conventional, high speed and freight to urban and regional services

European Technology Platforms



Energy

Hydrogen and Fuel Cell (HFP)
Photovoltaic Technology Platform (Photovoltaics)
Renewable Heating & Cooling (RHC-ETP)
Biofuels Technology Platform (Biofuels)
Electricity Networks for the Future (SmartGrids)
Zero Emission Fossil Fuel Power Plants (ZEP)
Wind Energy Technology Platform (TPWind)

Environment

Sustainable Chemistry (SUSCHEM)
Water Supply and Sanitation (WSSTP)
Forest-Based Sector Technology Platform (FTP)
European Construction Technology Platform (ECTP)
Sustainable Minerals Resources (ETP SMR)

Biotechnologies

Plants for the Future
Global Animal Health
Food for Life
Sustainable Farm Animal Breeding and Reproduction (FABRE)
Innovative Medicines Initiatives (IMI)
Nanotechnologies for Medical Applications (Nanomedicine)
Aquaculture Technology and Innovation Platform (EATIP)

Mobility

Road Transport Research Advisory Council (ERTRAC)
Rail Transport Research Advisory Council (ERRAC)
Waterborne ETP
Intermodal Research Advisory Council (EIRAC)
Advisory Council for Aeronautics Research (ACARE)
Logistics Innovation through Collaboration (ALICE)

Information – and Communication Technologies

NetWorld
Nanoelectronics Initiative Advisory Council (ENIAC)
Embedded Systems (ARTEMIS)
New European Media (NEM)
Networked Software & Services (NESSI)
Photonics Technology Platform (Photonics 21)
Technology Platform on Smart System Integration (EPoSS)
Technology Platform for High Performance Computing (ETP4HPC)

Industrial Technology

Platform for the Future of Textiles and Clothing (FTC)
Advanced Engineering Materials & Technologies (EuMat)
Industrial Safety
Future Manufacturing Technologies (MANUFUTURE)
Steel Technology Platform (ESTEP)

Stakeholders: Rail associations



Union des Industries Ferroviaires Européennes
European Rail Supply Industry Association



Union Internationale des Chemins de fer
International Union of Railways



Union Internationale des Transports Publics
International Association of Public Transport



Union Internationale des Wagons Privés
International Union of Wagonkeepers



European Rail Freight Association



Union internationale pour le transport combiné Rail-Route
International Union for Road-Rail combined transport



Notified Bodies for Interoperability in Rail

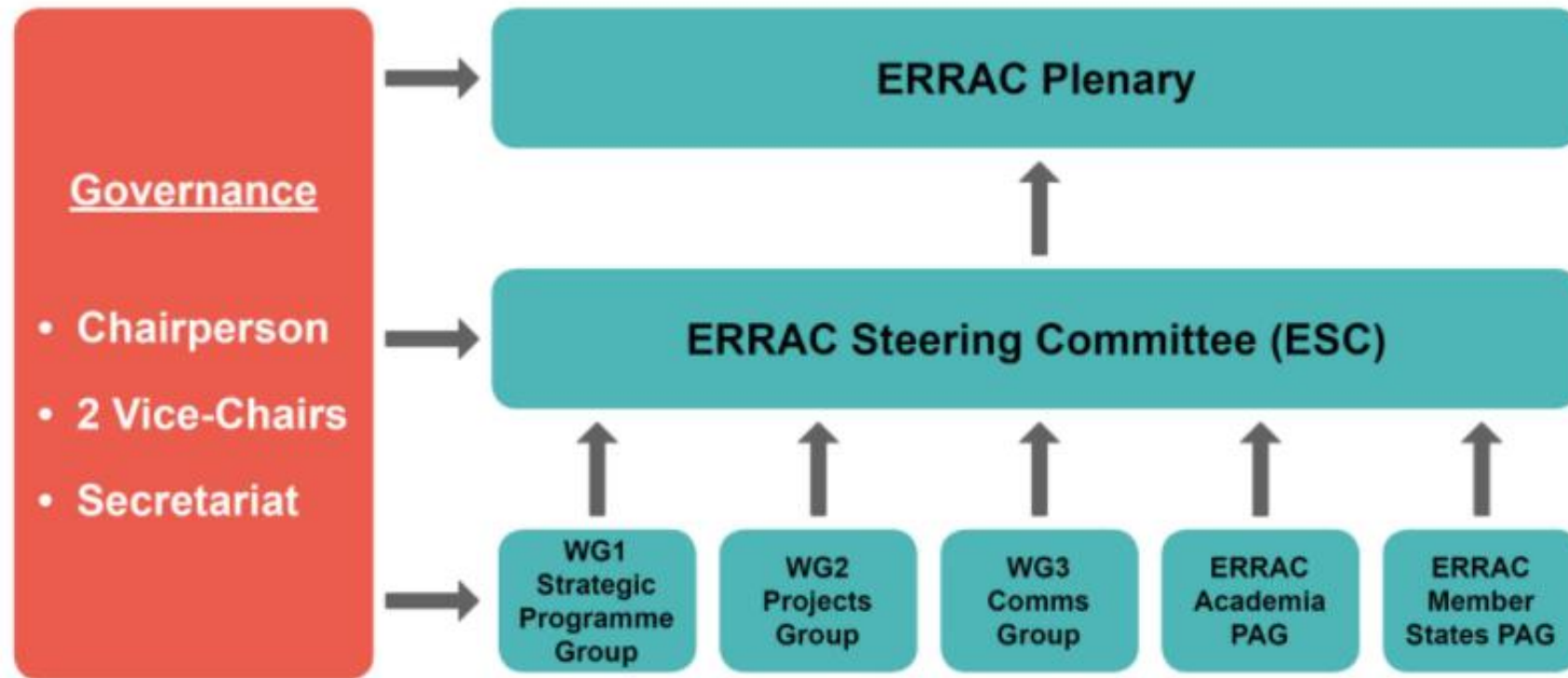


European Rail Infrastructure Managers



Communauté européenne du rail
Community of European Railway and Infrastructure
Companies

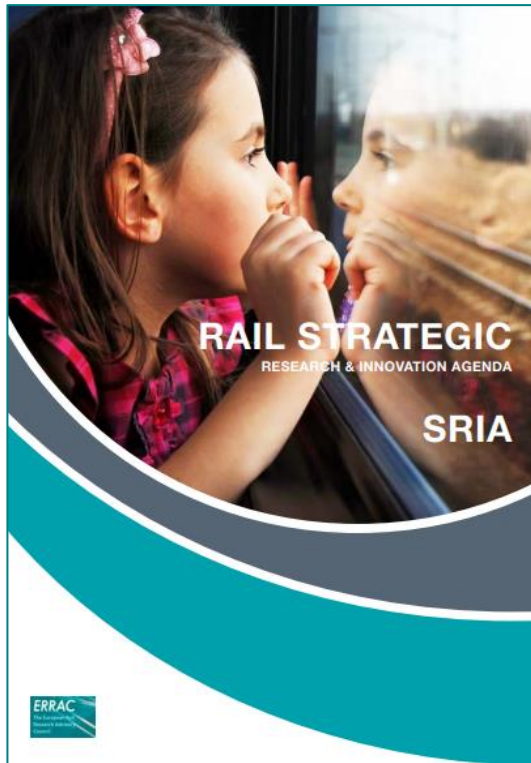
ERRAC - Structure



<https://errac.org/about/organisation/>

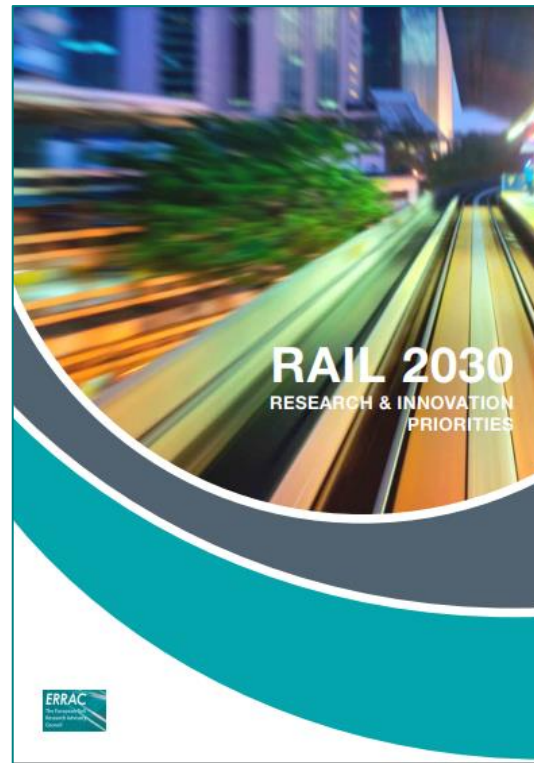
Key ERRAC Documents

Rail Strategic Research and Innovation Agenda (SRIA)



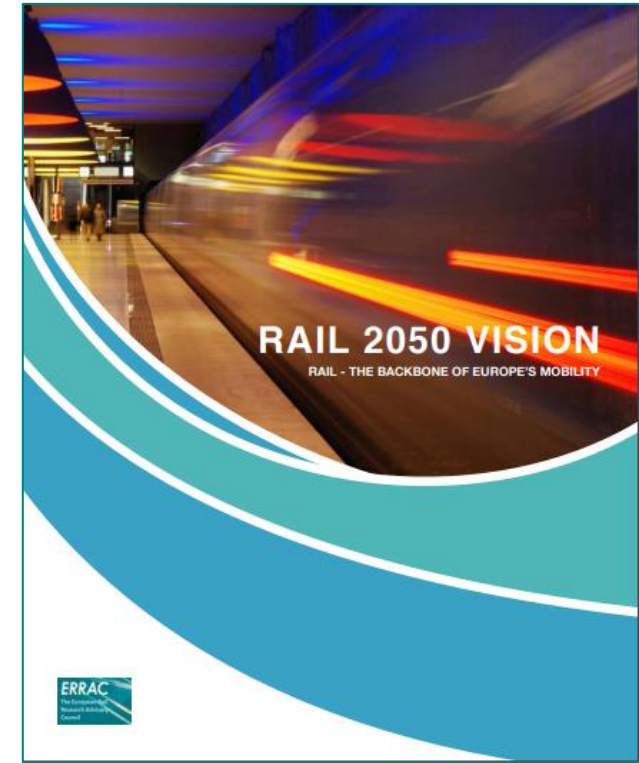
Rail 2030

Research and Innovation Priorities



Rail 2050 Vision

Rail – The Backbone of Europe’s Mobility



<https://errac.org/publications/>

ERRAC and Europe's Rail



Europe's Rail (aka ER-JU, ER Joint Undertaking, Shift2Rail successor)

Horizon Europe project of the European Rail sector, aiming to advance rail passenger and freight transport via a b1.2 EUR innovation programme. Focus on system architecture of a pan-European rail system of systems and the development of key enabling technologies, mainly in the field of digitalization.

Founding members are 10 major rail operators (e.g. DB and SNCF) and over 15 industrialists (e.g. Alstom and Siemens). Programme starts summer 2022.

ERRAC's main contribution: Strategic Research and Innovation Agenda (SRIA), 2020

Key document describing the sector's ambitions for the future technically-enabled railway and its research and innovation needs, was to be provided to the European Commission as part of the process to put in place a successor to the existing Shift2Rail research programme, now called "Europe's Rail"

ERRAC's current role in Europe's Rail

- Observatory member of Europe's Rail Governing Board
- Member of steering groups (e.g. System Pillar)

ERRAC Outlook 2021-2024

Main activities planned to date:

- **Gap Analysis ER-JU / SRIA**

ER-JU Budget significantly lower than anticipated:

- What important activities are not addressed?
- How could the sector do this work instead?

- **Manifesto of Future Mobility**

Railways are the first choice, because they are

- Sustainable
- Inclusive
- Individual
- The Backbone of multimodal transport

- **Collaboration with other platforms**

- *Leverage the possibilities of the DAC for the whole logistic chain*
- *Explore “Single Unit Logistics” Concept*

- **Work towards “Shift2Rail 3”**

Midterm review of the EC in 2024

- Follow-up Program to ER-JU needs to be put on rail in 24/25
- ERRAC as sector voice is body of choice to formulate expectations

New Website!
<https://errac.org>

ERRAC Key Events 2022

6-10 June 2022, Birmingham



20-23 September 2022, Berlin



14-17 November 2022, Lisbon



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