



## MISSION AND VISION STATEMENT

The Europe's Rail (EU-Rail) Joint Undertaking will contribute to the achievement of the Single European Railway Area, to a fast transition to a more attractive, user-friendly, competitive, affordable, efficient and sustainable European rail system, and to the development of a strong and globally competitive European rail industry, with an integrated system approach, research, development and demonstrations of innovative technologies and operational solutions (enabled by digitalisation and automation) for future deployment to deliver on EU policies such as the Green Deal objectives, a Europe fit for the digital age, and an economy that works for people and a stronger Europe in the world.

## KEY FACTS AND FIGURES

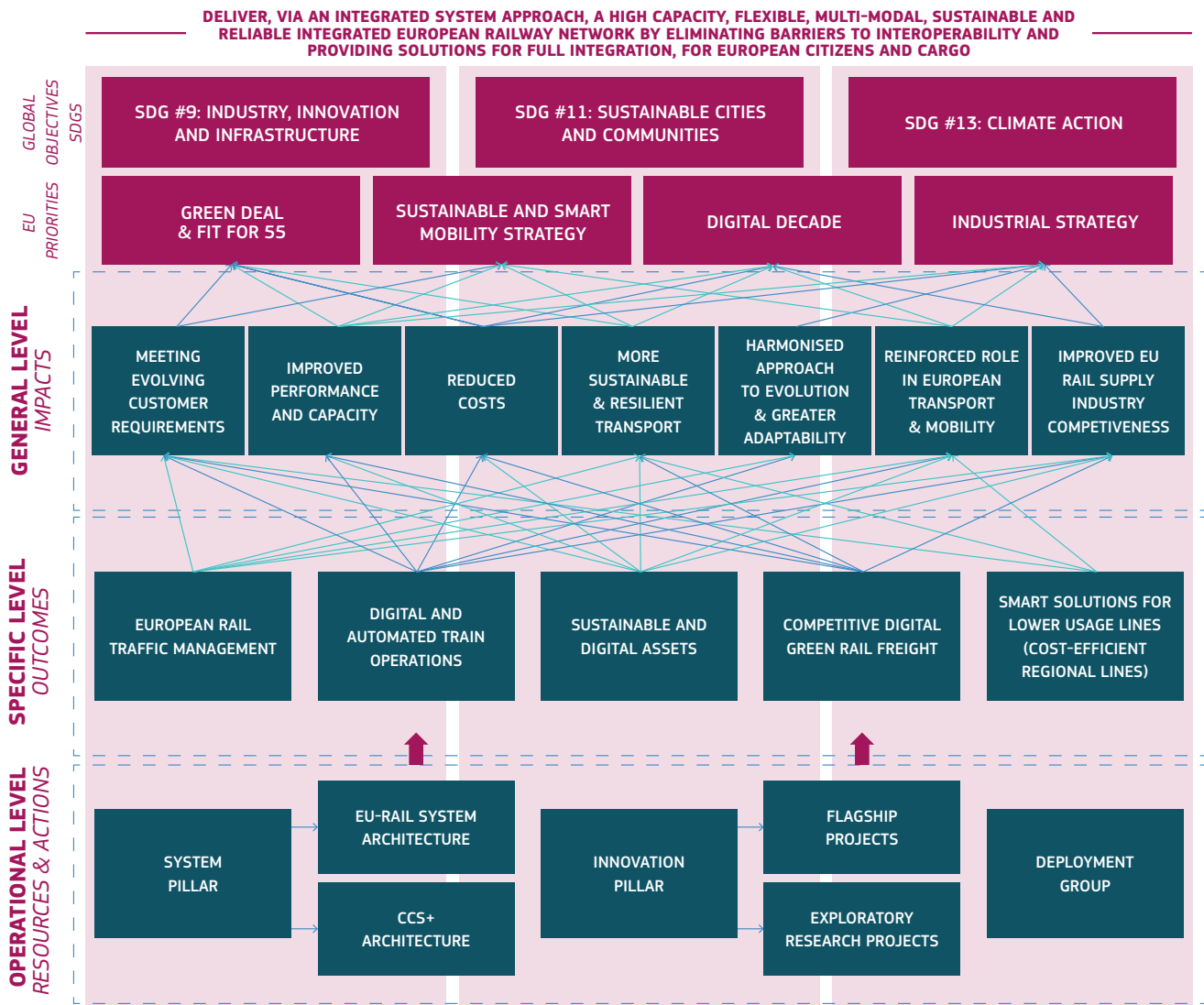
<b>Horizon Europe Pillar and Cluster:</b>	Pillar II – Cluster 5: Climate, energy and mobility
<b>Type of partnership:</b>	Institutionalised (Art 187 TFEU) – joint undertaking
<b>Total estimated budget:</b>	EUR 1.2 bn
<b>EU commitments:</b>	Up to EUR 600 m
<b>Partners' commitments:</b>	EUR 600 m
<b>Predecessor under Horizon 2020:</b>	Shift2Rail Joint Undertaking

## FIND OUT MORE

<https://rail-research.europa.eu>  
<https://shift2rail.org/about-europes-rail/europes-rail-ju-members/>  
<https://rail-research.europa.eu/about-europes-rail/contact/>



**PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)**





**PARTNERSHIP'S KEY PERFORMANCE INDICATORS**

*Data not available*

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
<b>RESOURCES (INPUT), PROCESSES AND ACTIVITIES</b>						
<b>OUTCOMES</b>						
<b>IMPACTS</b>						

A number of KPIs have been identified for each flagship area (reflecting the five outcomes of the PSIPs table). KPIs are available from the draft master plan and Multi-Annual Work Programme: <https://shift2rail.org/about-europes-rail/europes-rail-reference-documents/europes-rail-key-documents/>. A selection of these will be used as a reference baseline of the state of the art in 2020 (including results from S2R), and will allow a more focused transformation of the operational work delivered with projects' technical and operational results into more tangible societal impact qualifications. The societal impact measurement methodology will be developed in the first two years of the functioning of the joint undertaking on the basis of the technical and operational KPIs provided here. The calculations of the impact will be provided after each round of demonstrators that is in 2025, 2027 and 2031.



## SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

### CREATION OF A EUROPEAN ECOSYSTEM

Europe's Rail Joint Undertaking will establish an ecosystem that will facilitate interaction between stakeholders and makes co-operation within and across value chains more efficient. This will ensure that research is translated into market focused innovation through demonstration and deployment. In addition, the launch of large scale projects and demonstrators will also support the fast transfer of the innovation to the market. These projects, such as demonstrations would bring together technology suppliers and users. Finally and overall, the work to be performed by the partnership will also contribute to supporting the establishment of the Single European Railway Area, one of the key targets of the European Commission.

### COOPERATION AND SYNERGIES

EU-RAIL will put in place measures to maximise its impact using synergies with other European, national and regional programmes and activities. Beyond the involvement in the overall coordination of Horizon Europe, EU-RAIL will in particular focus on capturing synergies across the following:

**Synergies within the Climate, energy and mobility cluster:** the JU will reach out to other mobility JUs with the aim to build, where possible, consistent projects and demonstrators for climate neutral mobility solutions. This may also address shared areas of intervention such as multi-modal transport, automation in vehicles and other assets, decarbonisation, the use of alternative fuels, etc. In particular, a specific coordination with the European Partnership for Clean Hydrogen, as well as with the Battery co-programmed partnership appear to be of key relevance.

**Synergies with the Digital, industry and space cluster:** considering the key expectations coming from the digital transformation of rail, there are major expectations on how this cluster would contribute with rail-critical applications. Artificial intelligence, cyber-security and high-performance computing are cross-sectorial issues that require deep coordination especially for the development of use cases and the application of European standards. In addition, European space policy appears of key relevance, considering the ambition to introduce more and more satellite-based solutions for localisation or data transmission. Here also, synergies with EUSPA will be continued building upon the past experience.

**Coherence and synergies in relation to major national (sectorial) policies, programmes and activities:** it is estimated that around 15% of the EU stimulus package, the Recovery and Resilience Facility (RRF) will be invested in different areas of national rail systems. There is a need to ensure maximum levels of complementarity and impact, including focusing on future-proof investments. This will require the leveraging of local, regional and national investments to complement the research and innovation activities performed at the EU-RAIL level and vice versa. In this respect, the EU-RAIL state representatives group is expected to play a key role.

### COOPERATION WITH THIRD COUNTRIES AND OTHER ORGANISATIONS

In accordance with EU-RAIL's regulation, in carrying out its activities EU-RAIL shall seek a geographically balanced involvement of members and partners in its activities. It shall also establish the necessary international connections in relation to rail research and innovation, in line with the Commission's priorities. In this respect EU-RAIL strategy will be to conduct outreach activities with international partners pursuant to its strategy for cooperation with Third Countries and/or international organisations. In particular the strategy aims to contribute to the competitiveness of the European rail industry at the global level. EU-RAIL will continue the cooperation set up by the S2R JU with a number of key international partners, such as the Federal Railroad Administration (FRA), American Public Transportation Association (APTA), Federal Transit Administration (FTA) in the US, the Canadian Urban Transit Research and Innovation Consortium (CUTRIC), Gulf countries, India and in the near future, Australia.

In line with the policy priority of the Commission in terms of international relations on rail as well as keeping in mind the aforementioned objectives, it is expected that exchanges will take place with Australia, ASEAN, Japan and Mexico. The collaboration with the EU's neighbouring countries, in particular the Western Balkans, will continue and enhances further opportunities to explore for joint activities and large scale demonstrations.



**OVERVIEW OF MEMBERS**

*Data not available*

