

EIM's Position Paper

Key Success Factors for Achieving a Successful European High-Speed Rail Network

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Executive Summary

The European Commission's upcoming Communication on High-Speed Rail (HSR) is a key step toward delivering a seamless, sustainable and competitive European network. With targets to double traffic by 2030 and triple it by 2050, success will depend on a stable and coordinated policy, funding and implementation framework.

EIM supports this ambition and highlights the vital role of infrastructure managers in achieving it. To this end, EIM identifies eight key success factors, ranging from strategic planning and interoperability to long-term funding, coordination, workforce development and resilience.

Clear coordination, targeted investment and the full involvement of infrastructure managers will be essential to turn Europe's high-speed vision into reality.

Introduction

The European Commission has set ambitious targets to double high-speed rail (HSR) traffic by 2030 and triple it by 2050, as part of the broader objective to reduce EU transport emissions by 90% by 2050, in line with the 2020 Sustainable and Smart Mobility Strategy.

In this context, the Commission will publish a dedicated Communication in July 2025 presenting a comprehensive action plan to accelerate the deployment of a European high-speed rail network. The Communication will address key challenges - technical, financial, operational and regulatory - and propose coordinated solutions to improve planning, funding and implementation across Member States.

The objective is clear: to overcome persistent fragmentation in the TEN-T network and support the rollout of an efficient, interoperable and resilient HSR system.

European Rail Infrastructure Managers (EIM) fully support this strategic ambition and underlines the crucial role of infrastructure managers (IMs) in ensuring the effective delivery of the HSR network.

To ensure the full and successful implementation of this vision, number of significant challenges must be addressed. EIM has identified a series of Key Success Factors for the effective and synchronised rollout of HSR on the TEN-T network. These are elements we believe should be carefully reflected in the forthcoming EU framework for high-speed rail to ensure its long-term success.

Key Success Factors for High-Speed Rail Deployment in Europe

1. General Orientation

- To leverage the benefits of high-speed rail, the network should prioritise medium- to long-distance routes, typically in the range of 150 to 1.000 kilometres, where HSR can best promote a shift from air and road transport.
- It must connect major cities, capitals and key nodes like airports, while aligning EU and national planning strategies to avoid fragmentation.
- The network should aim for a coherent level of service quality across borders, ensuring passengers experience fast, reliable and accessible travel.
- While new HSR lines are crucial, substantial improvements must be made on existing infrastructure, through capacity upgrades, maintenance and removing barriers, as we cannot rely on the new HSR network alone to deliver an ambitious yet realistic shift to rail.

2. Market Alignment

- Strengthening the supply and manufacturing market is essential to ensure availability, reduce costs and support timely delivery of high-speed rail projects.
- Innovation driven by digitalisation, automation and targeted R&D must play a crucial role in enhancing the rail sector's performance.
- Public procurement rules should support open market access and ensure a diverse and competitive rail supply industry.

3. Interoperability & Technical Harmonisation

- Achieving full cross-border interoperability requires the accelerated deployment of ERTMS, along with harmonised capacity management and path allocation procedures.
- A stronger market for standardised infrastructure components and interfaces is essential to reduce technical barriers and avoid vendor lock-in
- Interoperability must be supported by efforts to develop unified, EU-wide systems, including ticketing tools, to facilitate seamless operations and improve the passenger experience.
- A clear and common definition of HSR is needed, one that also considers the overall travel time of journeys. This definition must allow flexibility to reflect services that combine high-speed and conventional lines, thus ensuring network consistency without limiting operational efficiency.

4. Long-term funding

- HSR projects can only be successful if they rely on a stable political, technical and financial framework over a longer period of time, in line with the duration and complexity of the projects.
- Blended finance tools like PPPs and concessions require clear EU guidelines and technical support to ensure effective deployment across all Member States. The EU Savings Market, as highlighted in the Draghi and Letta reports, could provide additional funding options for large-scale and long-term infrastructure projects.
- The creation of a dedicated HSR investment fund spanning multiple MFF periods would represent a true asset for enabling long-term planning.
- Continued ambitious CEF funding, particularly for cross-border sections, missing links, bottlenecks and the renewal and major upgrading of existing HSR networks, as well as the completion of the TEN-T network and ERTMS deployment, are critical to ensure the viability of infrastructure projects.

5. Planning & Coordination

- Planning and delivery times must be significantly reduced by simplifying cross-border approval processes. In this context, a clear regulatory framework for capacity management is essential to ensure the optimal use of both existing and new infrastructure.
- Improving the usability and transparency of the TENtec database is essential for efficient monitoring and coordination of HSR projects.
- CINEA should continue to play a central role in overseeing the implementation and financing of strategic rail infrastructure initiatives.

6. Security & Defence

- High-speed rail corridors must be designed with dual-use capabilities, supporting both civilian and military mobility. Projects should integrate defence-related requirements, including interoperability, heavy-load capacity and secure access.
- As critical infrastructure, HSR systems must also integrate robust cybersecurity measures to ensure operational continuity.

7. Sustainability & Resilience Goals

- Applying a life-cycle approach to rail infrastructure is essential to optimise asset management and avoid premature renewals.
- Climate resilience, regarding extreme weather events, must be systematically considered from the earliest stages of project planning and design.

- Greater harmonisation of Track Access Charge categories could be pursued, while recognising that levels may legitimately vary between countries due to differences in direct costs and the need to cover operational expenditure under the user-pays principle in a liberalised market.
- Fiscal conditions for rail, including HSR, must be improved to reflect its environmental benefits and create a level playing field with more polluting transport modes.

8. Human Resources

- Addressing labour shortages, attracting young talent and enhancing the overall appeal of infrastructure careers requires targeted upskilling and reskilling initiatives across all rail-related professions.

EIM's recommendations

To deliver on the EU's high-speed rail objectives, a coordinated and long-term political commitment is essential. The forthcoming Communication should provide a stable and enabling framework that allows high-speed rail to flourish as a strategic pillar of Europe's transport, security and climate agendas.

The framework should recognise the importance of flexibility in defining high-speed services and in managing operational costs to ensure competitiveness.

The EU must ensure that investments are targeted, long-term and prioritise projects of strategic value, including not only cross-border sections but also critical missing links and bottlenecks within Member States.

Clear coordination between Member States and EU institutions, reinforced by robust governance tools, will be vital to avoid fragmentation and ensure coherence across the network.

Fiscal and regulatory conditions must reflect the societal and environmental benefits of rail, creating a fairer playing field with other transport modes.

Europe's high-speed network must also support wider goals, including innovation, supply chain resilience, workforce development, dual-use capabilities and operational efficiency, recognising the importance of efficiently managing day-to-day operating costs alongside the development of new infrastructure.

As owners and operators of railway infrastructure, Infrastructure Managers are key enablers of high-speed rail, contributing essential expertise and long-term vision across all project phases.

EIM and its members remain committed to play an active role in building a truly European high-speed rail network. With the favorable political choices and a strong enabling environment, HSR can be a catalyst for a more connected, competitive and resilient Europe.