

## The Future of the Europe's Rail Joint Undertaking (ERJU) – A Future Policy Based Public Private Partnership for Rail

AERRL, ALLRAIL, ERFA welcome the Europe's Rail Joint Undertaking initiative to work on a unified message to spread as the new EU budgets are being drafted by the Commission. **We support its vision to deliver a Single European Rail Area by managing a harmonised innovation transition, providing competitive railway sector.** We also recognise its efforts to emphasise the need for coordination to ensure standard solutions for cross-border operations, offering benefits such as economies of scale, efficient research delivery, and affordable deployments, all while supporting EU strategic objectives like environmental sustainability, economic growth, enhanced connectivity, and strategic autonomy.

As major investors in locomotives and new technologies across Europe, lessors and new entrants invest over €1 billion per year in innovation. They account for approximately two-thirds of the European fleet of new locomotives, half of which are equipped with ERTMS. As representatives of lessors, new entrants and small operators working to expand the rail market and act as catalysts for competition and trans-European connectivity, we urge Europe's Rail to focus on the following key priorities:

- Innovation is important to ensure the future of European rail, but **standardisation and simplification are much higher priorities**, as they are a prerequisite for the commercial success and hence the survival of today's railways. Without standardisation, the cost of European rail is too high to make it a competitive mode of transport, which causes **a major risk of reverse modal shift**. In this context, innovation could be of a strategic (and not technological) nature. The adoption of a different deployment plan for key technologies like ERTMS, based on the **deployment of a single and stable technology at European level, would be a great strategic innovation that would be very beneficial for European rail**, putting an end to the current fragmentation that is undermining the whole sector.
- Currently, the deployment of new technologies in the rail sector is determined by the deployment strategies of infrastructure managers that has shown a lack of transparency. Railway undertakings and owners must therefore adapt their locomotives to the deployment of the infrastructure. However, locomotives are becoming increasingly expensive as technologies multiply. **Changing the paradigm would mean that when drafting strategies for deploying new technologies, a constant dialogue between infrastructure managers and infrastructure users would be established to better reflect the needs of the later.** From this perspective, it is no longer the locomotive that should adapt to the infrastructure in this direction alone, but rather **the infrastructure and the locomotives advancing on a coordinated path**.
- The preparatory work for the deployment of new technologies must in any case take into account the interests of all European stakeholders. On-board **migration strategies should be designed based on product strategies**, developed by OEM's, with **backwards compatibility guaranteed to existing ETCS equipped locomotives, as a key principle**. **Stable technologies are needed to ensure standardisation and an economic viable model** for the deployment of rolling stock. We need TSI regulations

that support the use of existing locomotives and not limiting it, therefore innovations shall be on an optional basis and not binding to all vehicles.

- As European associations, we support ERJU's desire to work together to develop rail transport, in particular through **coordination at EU level**.
- As small and medium-sized enterprises (SMEs) play an increasing role in the rail market, we believe Europe's Rail must adopt a more inclusive approach towards these companies in its operations. To enable SMEs to contribute effectively to the ERJU, an appropriate and proportionate financial contribution should be envisaged, recognising their significant role and expertise.
- We welcome the focus on the main challenges facing Europe's railways: **the fragmentation of the European rail system and maintaining competitiveness with other modes of transport** while managing the digital transition.
- We are concerned that ERJU's current approach does not sufficiently address the persistent 'innovation valley of death'—the gap between research and market implementation. **We expect a stronger stance on the tendency to support too many R&I projects, many of which have no clear path to practical deployment.** In our view, innovation should not be pursued for its own sake but should clearly support the **commercial viability of rail transport and contribute to increasing its market share**. Projects should primarily be selected on their economic viability and the likelihood of uptake, actively filtering out low-impact or redundant innovations.
- In general, we believe that when working on deployment, **the ERJU should follow as a fundamental principle the idea that an innovation should translate into financial benefits for the economic operators who adopt it.** Rail innovation aims both to improve safety/durability/resilience and to increase productivity. Migration strategies must therefore be designed so that productivity gains are felt as soon as the technology is adopted by the market. For example, given the investment required to equip a locomotive and its positive impact on increasing infrastructure capacity, it would make sense to reduce track access charges (TACs) for ETCS-equipped locomotives.
- On the European Competitiveness Fund, which will provide financial support for strategic initiatives to develop and manufacture key technologies in Europe, we believe that **priority should be given to the development of FRMCS, a strategic technology with strong potential for increasing European railway's competitiveness.**
- In the fields of research and innovation, we urge the ERJU to place **greater emphasis on projects that foster the development and modernisation of rail transport.** By prioritising these initiatives, we can drive railway commercial success, improve sustainability, and enhance the overall competitiveness of the rail sector:
  - We believe that ERJU should invest in **innovation and research projects to put an end to new conventional diesel traction.**
  - **Europe's Rail should also fund standardisation research projects** for OEM to develop a universal loco/passenger coach low-cost to decrease the cost of new rolling stock for international passenger rail transport, with a focus on cross-border operability, maintainability, and rapid deployment. This would help reduce not only the initial procurement costs but also the long-term lifecycle costs for operators, while enhancing fleet interoperability across the EU railway network.

- For the FRMCS deployment to be successful and affordable for locomotives owners, we call on the ERJU to participate in the development of a **FRMCS adapter solution to ETCS BL 3.4 (SV 2.0)**.
  - An efficient and **centralised administration tool for ERTMS codes and encrypted keys**, to enable faster delivery to rolling stock keepers after each upgrade
  - For all European infrastructure, **performants test on bench to facilitate testing ERTMS equipped locomotives** after each upgrade
  - Overall, we want the ERJU to be at the heart of the development of **critical interfaces**.
- Finally, we must stress the **limits of public subsidies**. Public aids to support cohesion within the European Union are essential for the growth of this mode of transport, but **it must not have a negative impact on the private sector's ability to invest**. In the case of rolling stock, public funding should be limited to the deployment of the following technologies: ERTMS, FRMCS, DAC, as well as to support companies to finance the requirements set out in the EU cybersecurity act. **As major investors in modern assets and new technologies, we consider that the support should be focused on implementing new technologies** and not on reducing purchase prices of standard equipment.