

ERTMS Position – New approach needed to avoid ERTMS losing its original purpose

13 February 2025

The EU-wide deployment of on-board and trackside ERTMS will improve interoperability, increase capacity and reinforce rail safety, therefore enabling the conditions for a Single European Railway Area. However, a series of difficulties including the increasing divergences of applying the ERTMS technology nationally and the absence of a business case for railway undertakings are putting ERTMS on the verge of losing its original purpose. Avoiding a derailment of ERTMS urgently requires a new joint approach.

ERTMS is an evolutionary technology by nature. However, there is a significant gap between acknowledging this reality and living in a state of **continuous changes and instability of ERTMS specifications**. It is common throughout the EU that the evolution of specification overtakes ERTMS deployment. This situation acts as an innovation killer for manufacturers that are overloaded and overburdened with fulfilling new specifications. Railway undertakings, on the other side, are facing explosive costs and are constantly at risk of seeing their substantial investments in on-board units quickly becoming obsolete.

→ *The European Union should focus on **minimising specification changes** to the utmost necessary while adopting a stable, reliable and multi-annual standard to be deployed throughout the network before adding any significant changes to how the system works.*

ERTMS deployment plans are directed by infrastructure managers with a strong national focus that do not properly take into account the cross-border nature of rail freight traffic where over 50% of trains cross at least one national border. Freight operators therefore have to navigate along corridors made up of “ERTMS islands” with high requirements (only 14% of the Core Network is equipped) and other areas with diverging deployment speeds for both track-side and on-board units. They also face diverging national interpretation of how to make ERTMS works. These so-called “ERTMS grammars” are an increasingly important obstacle to interoperability.

→ *ERTMS users should be consulted in the development of **deployment plans that are reliable and consistent**. These plans should consider backward compatibility of existing rolling stock and the possibility of implementing upgrades on vehicles not yet homologated. The Commission should gain new power to supervise the implementation of these plans.*

While previous class-B system tests for ESC/RSC (ETCS Radio System Compatibility) applied at national level, operators are now facing an uncontrolled diversity of tests that can diverge by route design and track manufacturer. The average time needed for software approval for an international vehicle is at least a year, representing an enormous bottleneck for cross-border traffic and a major cost driver for operators.

→ *The EU should minimise and **harmonise test specification** and maximise coordination of test cases across different countries through national authorities, involving ERTMS users. The objective of no additional verifications as stated in TSI CCS should be achieved as soon as possible.*

The slow deployment of ERTMS is ongoing in a complex environment with scarce public money available, additional **technological projects** that will eventually compete for the same budget lines, and operators performing economic activities that are able to generate limited margin for new investments.

→ *The EU should **focus technological funding on ERTMS** deployment given its importance for achieving the SERA. This priority of projects should be reflected in the new MFF.*

For more information, you can Contact:

European Rail Freight Association asbl, info@erfarail.eu, Tel +32 2 513 60 87;
Rue Montoyer 39, B-1000 Brussels ; Reg nr. 0478.440.721. Belgian official gazette 26.11.2007