ERTMS

Objective

ERTMS (European Rail Traffic Management System) is the European standard for automatic train protection. ERTMS consists in a safety system that enforces compliance by the train with speed limitations and the signalling status. This system is installed both on the rail track (trackside subsystem) and on the rolling stock (on-board subsystem).

According to the relevant EU legislation, such as the Guidelines on the Trans-European Network Transport (TEN-T), the deployment of ERTMS is mandatory on railway infrastructure projects for new or upgraded rail subsystems receiving financial support from the EU. Furthermore, following the entry into force of the 4th Railway Package, any ERTMS project has to be approved by the EU Agency for Railways (ERA) to ensure interoperability ("ERTMS Trackside Approval"). ERTMS is therefore one of the key enablers to create a Single European Railway Area in which trains can run seamlessly.

The ERTMS activities are framed under Regulation (EU) 2016/919 on the Technical Specification for Interoperability relating to the Control-Command and Signalling (CCS TSI). CCS TSI applies to both on-board subsystems of vehicles and control-command and signalling trackside subsystems of the rail networks.

Involvement of Infrastructure Managers

Infrastructure Managers (IMs) are the key drivers of the deployment of ERTMS on national level. Traditionally, national rail safety and signalling systems have been developed by manufacturers considering the specificities of each single national system. The "ERTMS Trackside Approval" process will therefore enable interoperability, reduce purchasing and maintenance costs, while ERTMS shall improve the capacity of the infrastructure via increased train speeds as well as improved safety of the network.

EIM in action

› EIM contributes to the European Commission’s “ERTMS Stakeholder Platform” together with the EC, ERA, railway undertakings, and suppliers;
› EIM’s ERTMS Working Group (ERTMS WG) follows the evolution of ERTMS in Europe. The ERTMS WG cooperates with other EIM WGs (e.g.: Train Detection Compatibility (TDC WG) and Telecommunications Working Groups (TEL WG)) to ensure a single, coherent EIM position in this domain.