



ERTMS

Making the railway
system work better
for society

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ERTMS (“European Rail Traffic Management System”) is a major industrial project being implemented by Europe, a project that will serve to make rail transport safer and more competitive.

The fundamental objective of ERTMS is to develop and to deploy a single harmonised Control, Command, Signalling and Communication system that is fully interoperable across borders, that can be sourced from a broad supply base, and whose evolution is based on compatibility.

ERTMS is the backbone for a digital railway system.

The European Train Control System (ETCS), and the Global System for Mobile communications — Railways (GSM-R), are the two integral parts of ERTMS.

Interoperability and compatibility are collective European problems, requiring the cooperation between Member States, operators, and suppliers. A collective problem cannot be resolved bilaterally in individual projects – a strong coordination is necessary in order to ensure consensus and mutual benefit.

Building on the growing return of experience from successful commercial exploitation of ETCS Baseline 2, legally enforced in 2008, the Agency and the Sector have now produced the second release of ETCS Baseline 3. With this latest development, offering symmetric compatibility with the Release 1, we have now a mature and functionally complete set of specifications, which will remain stable for a long period, protecting investment in on-board and trackside implementations, enabling widespread deployment.





ERTMS Stakeholders Platform

The purpose of the ERTMS Stakeholders Platform is to facilitate, with the involvement of decision makers from the whole European railway sector, a fully synchronised approach to the development of ERTMS, in order to ensure an economically beneficial ERTMS setting across Europe.

The platform covers all aspects of the ERTMS system and products that are necessary to ensure full compatibility and interoperability in Europe: the ERTMS specifications (including the alignment of the response to specification errors, product errors and a harmonized approach on engineering rules), test and verification of ERTMS products, and authorization.

THE EUROPEAN UNION AGENCY FOR RAILWAYS

The Agency is the system authority for ERTMS, ensuring the specifications are maintained and managed in accordance with the principles of stability and compatibility, and helping the implementations of the system according to the principles of compliance and discipline. The new roles defined in the 4th Railway Package for the Agency in delivering vehicle Authorizations and Approvals to ERTMS trackside projects allow a strengthened leadership in the efficient implementation of the framework and in the application of standards.

The Agency works institutionally with the Sector Organizations, and for ERTMS has dedicated actions on technical, safety and operational areas.

In the field of railway communications, the Agency defines the roadmap for the evolution of operational radio in view of the planned GSM-R life expectancy, aiming at a definition of the new radio communication systems in 2018.

The increasing focus on follow-up of ERTMS deployment, facilitated by the synergy with the Deployment Management Team, and by the coordination with INEA on EU funded projects is instrumental in ensuring the readiness of the Agency to take up responsibilities in Authorization and Approvals for ERTMS.

The Agency also provides technical support to the ERTMS Coordinator in its work and initiatives.

The mission of the Agency is to make the railway system work better for society.

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*Following the entry into force of the technical pillar of the 4th EU Railway Package (Reg. 2016/796), the European Union Agency for Railways replaces and succeeds the European Railway Agency. The change of name requires also a new corporate design. The "Agency" refers as from now to the European Union Agency for Railways. However depending on the context, some parts of this brochure still refer to the former European Railway Agency.

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Publications Office

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Luxembourg: Publications Office of the European Union, 2016

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TR-04-16-707-EN-N • ISBN 978-92-9205-228-7 • doi:10.2821/88333