

# RIS-0799-CCS issue one Rail Industry Standard for ERTMS/ETCS Baseline 3 Onboard Subsystem requirements

## Background

RIS-0799-CCS issue one consolidates the requirements for the application of ETCS onboard subsystems to rail vehicles so that they are capable of being safely integrated into the GB mainline railway and aligning with the GB ERTMS/ETCS requirements suite. RIS-0799-CCS issue one has been developed from RIS-0798-CCS issue one and RIS-0797-CCS issue one which set out the ETCS onboard subsystem requirements for new and existing (retrofit) rail vehicles, respectively.

## What is it about?

RIS-0799 CCS issue one sets out the requirements together with their supporting rationale and guidance for the application of ERTMS/ETCS Baseline 3 Release 2 compliant onboard subsystems to new and existing (retrofit) rail vehicles. The requirements can be used to procure an ETCS onboard subsystem that can be safely integrated into the GB mainline railway.

## What has changed?

RIS-0799-CCS issue one is developed from and replaces both RIS-0797-CCS issue one and RIS-0798-CCS issue one which are withdrawn in their entirety. RIS-0799-CCS issue one sets out separate requirements for new and existing trains where they differ together with requirements that are applicable to both where there is commonality. RIS-0799-CCS issue one includes new requirements that have been incorporated to align with the GB ERTMS/ETCS baseline requirements suite. The key changes address automatic train operation (ATO), online key management, train data definition and

entry. Other changes include the need for the ETCS onboard subsystem to implement the error solutions published in ERA technical opinions, and updated requirements on the symbol and button labels displayed on the ERTMS/ETCS driver machine interface (DMI) to help the driver in correctly selecting and identifying the current ETCS level for AWS/TPWS operations. Where requirements have been identified to be unnecessary, they have been withdrawn, and other requirements have been amended where appropriate to remove ambiguity and provide clarity.

## What are the benefits?

Having one set of requirements in one standard, will reduce document maintenance, simplify compliance, and provide less opportunity for inconsistency and confusion. Aligning the standard with the GB ERTMS/ETCS requirements suite supports integration across the GB mainline railway and enables industry to procure ETCS onboard subsystems in accordance with the latest industry requirements, which will help avoid potential retrospective changes.

## Who is it for?

This standard will be of interest to project entities, infrastructure managers and railway undertakings, CCS suppliers and designers, rail vehicle manufacturers, designers, and owners. RIS-0799-CCS issue one can be adopted by rolling stock owners (ROSCOs), suppliers and railway undertakings under their respective safety/quality management system or when specifying products and services.