



## Briefing Note

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### Documents for GE/GN8605 ETCS System Description

#### New documents

Document number	Document title	Issue
GE/GN8605	ETCS System Description	1

**Standards Committee:** CCS

**Issue date** 02/02/2010

**Document comes into force:** 02/02/2010

#### Background

The publication of the Control Command Signalling Technical Specification for Interoperability (TSI) mandates the implementation of the European Rail Traffic Management System (ERTMS) on the Trans European Network under certain circumstances, for example, major upgrade. The Department for Transport (DfT) has delivered an ERTMS National Implementation Plan<sup>1</sup> to the European Commission that covers the implementation of both ERTMS and GSM-R. The Plan was put together by the ERTMS Programme (the “Programme”) and supported by the ERTMS Strategy Group; a senior cross-industry group chaired by the DfT. The Plan aligns with expected resignalling dates and rolling stock replacement dates wherever possible to produce the most economic outcome.

The Future Train & Operational Control Systems cross-industry team is charged with developing the system design for application of ERTMS in Great Britain so that the National Implementation Plan can be delivered consistently and in accordance with the Essential Requirements of the Interoperability Directives. This design is proposed to be published in the form of standards and the Programme has the responsibility for developing these. In some cases these Standards will meet the criteria for Railway Group Standards, Guidance Notes and Rail Industry Standards.

ERTMS is composed of four elements.

- European Train Control System (ETCS). This is the train-control element of ERTMS and includes Automatic Train Protection.
- Global System for Mobile communications – Railways (GSM-R). This is the telecoms element of ERTMS which, in some applications, carries ETCS data between trains and the trackside infrastructure.
- European Traffic Management Layer (ETML). This is a concept to optimise railway operations through improved management of train running to maximise the potential of a given layout and to reduce scheduling conflicts.
- European Operated Rules (EOR). This is a set of agreed rules to standardise certain aspects of rail operations across Europe.

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<sup>1</sup> ERTMS National Implementation Plan, Department for Transport, September 2007



## **Briefing Note**

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### **Scope**

The proposed Guidance Note describes the system architecture and behaviour of ETCS<sup>2</sup> as it will be implemented in Great Britain (GB).

The proposed Guidance Note seeks to provide sufficient information to enable infrastructure managers and railway undertakings to understand the basic principles of ETCS and its part in the safe movement of trains. It accompanies the ERTMS Operational Concept and provides a greater level of technical detail about how ETCS will operate within GB.

### **Key changes**

Proposed publication of a new Guidance Note: GE/GN8605 ETCS System Description.

### **Compliance requirements**

Not applicable as GE/GN8605 is a Guidance Note.

### **Impact of proposed changes to National Technical Rules (NTRs)**

There is no impact on National Technical Rules.

### **Deviations authorised by RSSB**

There are no deviations authorised for GE/GN8605.

### **Technical Notes authorised by RSSB**

There are no technical notes in place for GE/GN8605.

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<sup>2</sup> Specifically ETCS as defined in version 2.3.0d of the ETCS Class 1 System Requirements Specification, Subset 026