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RAILTRACK
Safety & Standards

Briefing Notes for:	Compatibility Between Electric Trains and Electrification Systems	
Document No:	GE/RT8023	Issue: One
Subject Committee(s)	Electrification, Traction & Rolling Stock	
Issue date:	October 2000	
Initial Compliance Date	2 December 2000	

BACKGROUND

This document incorporates amendments to the existing standard GM/RT1000, but due to recent changes to the numbering format of Railway Group Standards this amendment now appears as Issue One of new standard GE/RT8023.

GM/RT1000 was reviewed against the background of higher speed (above 125 mile/h) and tilting operations and the introduction of a new traction power supply system. This review identified the need to amend the standard in three areas, namely:

- the evaluation of the consequences of a proposed change was not followed through into identifying and implementing any remedial or mitigating measures;
- the withdrawal of the previous Code of Practice GM/RC1502 had left an absence of technical data describing compatibility issues;
- the types of change described in the standard were unnecessarily restrictive and excluded certain important categories of change and compatibility issues.

KEY CHANGES INTRODUCED BY THIS STANDARD

- Withdrawal of Standard GM/RT1000, Compatibility Between Electric Trains and Electrification Systems;
- Introduction of Standard GE/RT8023, Compatibility Between Electric Trains and Electrification Systems.

The standard has been re-categorised to reflect its application to multi-disciplinary activities.

The primary object of the redraft was to make it less specific and to give greater guidance on the type of compatibility issues, and the following requirements have been added to the original standard:

- clarification of the necessity to identify any necessary remedial measures prior to a change being introduced;
- clarification of the necessity to implement those remedial measures prior to a change being introduced;
- reference to a documented record called an 'electrification statement' where compatibility evaluations are recorded;
- inclusion (in an Appendix) of technical compatibility issues that may require to be addressed;
- the types of change expanded so as not to be unnecessarily restrictive, and included in a prescriptive requirement.

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The principles that have been adopted can be summarised as:

- all changes to be considered, but significant ones (where significance is to be agreed between the parties) evaluated in the prescribed manner;
- all relevant compatibility issues to be evaluated;
- methodology and results of evaluation agreed by all parties;
- any mitigating or remedial measures identified;
- change no implemented until mitigating measures also implemented;
- subsequent to introduction of change verification of effects of change and supplied data.

The technical requirements for many of the technical compatibility issues listed in the appendix to this standard are contained in other Railway Group Standards. Route acceptance of trains onto infrastructure is covered in a more general way in existing Railway Group Standard GO/RT3270 Route Acceptance of Rail Vehicles. Verification activities are covered in new (amended) Railway Group Standard GE/RT8016 Verification of Electrification Systems and Interactions with other Systems.

COMPLIANCE

The provisions in this Railway Group Standard are to be complied with from 2 December 2000.

Railway Group Standard GM/RT1000 will be withdrawn with effect from 2 December 2000.