

Railway Group Standard

GE/RT8270

Issue Three

Date December 2015

Assessment of Route Compatibility of Vehicles and Infrastructure

Synopsis

This document sets out requirements and responsibilities for the assessment of route compatibility of vehicles and infrastructure.

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Issue record

Issue	Date	Comments
One	February 2003	Original document Superseded GO/RT3270 issue two and parts of GC/RT5161 issue two, GE/RT8015 issue one and GE/RT8029 issue one.
Two	October 2007	Replaces issue one
Three	December 2015	Replaces issue two Revised to take account of the changes to the regulatory framework and Appendix C being superseded by GE/RT8273.

Amended or additional parts and / or sections of revised pages have been marked by a vertical black line in the adjacent margin.

Superseded documents

The following Railway Group Standard is superseded, either in whole or in part as indicated:

Superseded documents	Sections superseded	Date when sections are superseded
GE/RT8270 issue two Assessment of Compatibility of Rolling Stock and Infrastructure	All except Appendix C	05 March 2016

GE/RT8270 issue two Assessment of Compatibility of Rolling Stock and Infrastructure, ceases to be in force and is withdrawn as of 05 March 2016.

Supply

The authoritative version of this document is available at www.rssb.co.uk/railway-group-standards. Enquiries on this document can be forwarded to enquirydesk@rssb.co.uk.

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Part 1 Purpose and Introduction

1.1 Purpose

- 1.1.1 Before any new or altered infrastructure or vehicle is put into use, or the use of infrastructure or vehicles is changed, it is essential that the change is assessed to ensure that compatibility between assets is maintained.
- 1.1.2 This document therefore sets out requirements and responsibilities for the assessment of route compatibility between infrastructure and vehicles, and the arrangements by which the assessment of compatibility is undertaken and identifies those responsible for managing that assessment.
- 1.1.3 This document is also applicable when assessing compatibility between vehicle and vehicle, or infrastructure and infrastructure, where the assets concerned are the responsibility of different railway undertakings or infrastructure managers.

1.2 Introduction

1.2.1 Background

- 1.2.1.1 The regulatory framework relating to the introduction of new or altered infrastructure or vehicles is largely determined by:
 - a) The Railway Interoperability Directive 2008/57/EC (as amended), transposed by the Railways (Interoperability) Regulations 2011 (as amended).

And

 - b) The Railway Safety Directive 2004/49/EC (as amended), transposed by the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended).
- 1.2.1.2 Each railway undertaking and infrastructure manager is made responsible for the safety of their own part of the railway system. Neither party gives permission to or has authority over the other. However, railway undertakings and infrastructure managers are required to cooperate with other railway undertakings and infrastructure managers where they are taking action to achieve the safe operation of the railway system.
- 1.2.1.3 The Directives create a fundamental regulatory separation between:
 - a) 'Placing in service' – gaining authorisation of new and altered vehicles and infrastructure before they are used. Placing in service is the responsibility of the 'project entity' (as defined in the Railways (Interoperability) Regulations 2011 (as amended)). Any organisation can undertake the role of a 'project entity' as long as it meets the definition in the Regulation, for example, a manufacturer and that organisation does not need to be a railway undertaking or an infrastructure manager.
 - b) 'Putting into use' – using the vehicles and infrastructure in day-to-day operation under the safety management systems of railway undertakings and infrastructure managers.
- 1.2.1.4 If authorisation for placing in service is required, it is given by the national safety authority. In Great Britain (GB), the national safety authority is the Office of Rail and Road (ORR).

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1.2.1.5 The regulatory separation of placing in service and putting into use is intended to facilitate the opening of the market for railway products and services.

1.2.1.6 Further discussion of the regulatory separation between placing in service and putting into use can be found in Commission Recommendation 2014/897/EU on matters related to the placing in service and use of structural subsystems and vehicles under Directives 2008/57/EC and 2004/49/EC.

1.2.2 Placing in service

1.2.2.1 Essentially, Article 15 of Directive 2008/57/EC sets out three elements to be checked before a vehicle or infrastructure is placed in service, in order to meet the essential requirements (summarised as safety, reliability and availability, health, environmental protection, technical compatibility, and accessibility to persons with disabilities and persons with reduced mobility):

- a) That it complies with TSIs and national rules.
- b) That it is technically compatible with the system into which it will be integrated.
- c) That it can be 'safely integrated'.

1.2.2.2 Although both 'technical compatibility' and 'safety' are essential requirements, the application of standards alone may not be sufficient to demonstrate that they have been met, and therefore additional processes are required when putting new and altered vehicles and infrastructure into use, following their placing in service.

1.2.3 Safe integration

1.2.3.1 Safe integration can be demonstrated by application of the risk management process set out in the Common Safety Method for Risk Evaluation and Assessment (CSM RA) established by Commission Implementing Regulation No 402/2013 (as amended).

1.2.3.2 Application of the CSM RA is required for 'any change of the railway system... which is considered to be significant within the meaning of Article 4 of [the] Regulation'.

1.2.3.3 However, clause 3.4.2.2 of The ORR's Policy statement on the relationship between the CSM RA and other risk assessment requirements (RGD-2013-06, December 2013) notes that:

'It is possible to adopt the CSM RA approach even when there is no legal requirement to do so (for example, when a change is not significant). Following the CSM approach correctly in these circumstances is likely to mean that domestic safety legislation [which requires a suitable and sufficient risk assessment to be undertaken] is complied with'.

1.2.3.4 Further guidance on the application of the CSM RA is available in six complementary Rail Industry Guidance Notes (GNs): GE/GN8640, GE/GN8641, GE/GN8642, GE/GN8643, GE/GN8644 and GE/GN8645.

1.2.4 Technical compatibility

1.2.4.1 Technical compatibility between vehicles and infrastructure is addressed at three levels:

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- a) European level: checking compatibility with the target European railway system by reference to TSIs.
- b) Network level: checking compatibility with the generality of the GB mainline network, by reference to Railway Group Standards (as national technical rules).
- c) Route level: checking compatibility of a vehicle with a particular route, or infrastructure with the vehicles intended to operate over a route, dealt with under the safety management system of the railway undertaking or infrastructure manager introducing new and altered vehicles and infrastructure.

1.2.4.2 The first two levels are relevant to placing new and altered vehicles and infrastructure in service, and therefore, in certain circumstances, may be subject to formal verification and authorisation in accordance with the Railways (Interoperability) Regulations 2011 (as amended).

1.2.4.3 The third level is not a matter for placing in service, but is considered as part of putting new and altered vehicles and infrastructure into use. It is therefore not subject to formal verification and authorisation in accordance with the Railways (Interoperability) Regulations 2011 (as amended). Furthermore, there is no common safety method for assessing technical compatibility at route level, equivalent to the CSM RA.

1.2.4.4 Therefore in the absence of a common safety method, this document, GE/RT8270, sets out a national safety method for assessment of compatibility between infrastructure and vehicles at route level. As such, it meets the criteria for being a national safety rule of type 1 in accordance with Annex II of the Railway Safety Directive 2004/49/EC.

1.2.5 Compatibility process covered by this document

- 1.2.5.1 The compatibility process covered by this document is confined to the assessment of compatibility between infrastructure and vehicles on the GB mainline network.
- 1.2.5.2 GE/RT8273 sets out specific requirements and responsibilities for the assessment of gauging compatibility between vehicles and infrastructure.
- 1.2.5.3 GE/RT8006 sets out specific requirements for the assessment of compatibility between the static load characteristics of rail vehicles and the capacity of underline bridges to carry the vertical static and dynamic loads imposed by the rail vehicles.
- 1.2.5.4 The process set out in this document does not apply to the assessment of compatibility between the railway system and assets outside the railway system; however, specific legislation may apply (for example, the Electromagnetic Compatibility Regulations 2006).

1.2.6 Commercial arrangements

- 1.2.6.1 Introducing new and altered vehicles and infrastructure is likely to require commercial arrangements to be put in place in respect of track access, vehicle change and / or network change, as appropriate. These arrangements are outside the scope of this document.

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1.3 Approval and authorisation of this document

- 1.3.1 The content of this document was approved by Rolling Stock Standards Committee on 10 October 2015.
- 1.3.2 This document was authorised by RSSB on 27 October 2015.

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Part 2 Process for Assessment of Compatibility**2.1 Responsibilities of parties proposing any change**

- 2.1.1 The railway undertaking or infrastructure manager proposing a change (the proposer) shall determine whether an assessment of compatibility is required. An assessment of compatibility is required if:
- a) The proposed change is a material change (see definitions).
- And
- b) The physical or operational interfaces affect assets that are the responsibility of another railway undertaking or infrastructure manager (an affected party).
- 2.1.2 If an assessment of compatibility is required, the proposer shall identify all affected parties, and inform them of the proposed change. Section A.2 in Appendix A gives additional guidance on informing industry parties of other proposed changes.
- 2.1.3 The proposer shall decide on the method of engaging with affected parties for the purpose of exchanging information and reviewing the compatibility of the proposed change with the assets of the affected parties, taking into account the complexity and significance of the proposed change.
- 2.1.4 When informing affected parties of the proposed change, the proposer shall also advise them of the chosen method of engaging with them for the purpose of exchanging information and reviewing the compatibility of the proposed change.
- 2.1.5 Where an affected party believes that the appropriate method of engagement has not been selected by the proposer, the affected party can request an alternative method of engagement such as a meeting or a compatibility review forum (see section 2.5), stating the reasons for the request.
- 2.1.6 The proposer shall respond to the request of the affected party, referred to in 2.1.5, with their decision on the method of engagement.

2.2 Assessment of compatibility

- 2.2.1 Technical requirements for undertaking an assessment of compatibility are set out in Part 3.

2.3 Compatibility File

- 2.3.1 The proposer shall assemble a Compatibility File (or update an existing applicable Compatibility File).
- 2.3.2 The Compatibility File shall contain data that describe the new asset or the change to an asset, the methods used to assess compatibility, the decision criteria used to declare compatibility and how they have been derived.
- 2.3.3 The Compatibility File shall contain or reference all the evidence that demonstrates the compatibility of new or changed vehicles with the infrastructure they operate over and with other vehicles that operate on that infrastructure; or the compatibility of new or changed infrastructure with the vehicles that operate over it and any other infrastructure with which it interfaces.

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- 2.3.4 Where a compatibility review forum has been established, the Compatibility File shall also contain or reference a copy of the minutes of the compatibility review forum.
- 2.3.5 The Compatibility File shall record any operational restrictions on which compatibility depends (for example, a speed restriction over particular sections of route) and the limiting conditions which cause the restriction to be necessary. In the case of interfaces that depend on the proximity of vehicles involved (see 3.4.2), the Compatibility File shall record the demands of the vehicles as a proportion of the capacity of the infrastructure over particular sections of route.
- 2.3.6 The Compatibility File shall be passed to the owner of the asset. In the case where a technical file exists, the Compatibility File forms part of the technical file.

2.4 Review of assessment of compatibility

- 2.4.1 The proposer shall produce a draft Statement of Compatibility (see 2.6) and then forward it to all the affected parties for review.
- 2.4.2 The proposer shall set a timeframe for the affected parties to respond to the draft Statement of Compatibility. Where necessary, the affected parties, in their response, are permitted to request further time from the proposer to review the draft Statement of Compatibility. The proposer is to select a timeframe that is proportionate to the complexity and significance of the change to ensure the affected parties have an appropriate amount of time to respond.
- 2.4.3 The affected parties shall review the draft Statement of Compatibility and provide the proposer with their comments in a timely manner. Where necessary, for the purpose of this review, it is permissible for affected parties to request access to those parts of the Compatibility File relevant to the assets for which they are responsible.
- 2.4.4 The proposer shall make the relevant parts of the Compatibility File available to affected parties when requested, as set out in 2.4.3.
- 2.4.5 Where a compatibility review forum has been convened, the compatibility review forum shall review the draft Statement of Compatibility, together with those parts of the Compatibility File it considers necessary.
- 2.4.6 The proposer shall take account of comments received from affected parties before authorising and issuing the Statement of Compatibility. It shall advise those making the comments of how their comments have been taken into account.
- 2.4.7 The review process shall be conducted with the objective of achieving a consensus that the proposed change is compatible with the assets of the affected parties, given the identified limitations, restrictions or requirements on which the compatibility depends.
- 2.4.8 It will not always be possible to reach a consensus. If it is apparent that there is no consensus, or if an affected party considers that its comments have not been fully taken into account, the following steps shall be taken to resolve outstanding issues:
 - a) Where engagement has not been through a compatibility review forum, a compatibility review forum shall be convened with the objective of achieving a consensus (see 2.5).