



Management of national technical rules for the GB mainline railway

1 Purpose

- 1.1 The purpose of this paper is to describe the cross-industry process applicable to the GB mainline railway for managing national technical rules (NTRs) associated with the European Technical Specifications for Interoperability (TSIs).

2 Introduction

- 2.1 Article 16(3) of the European Interoperability Directives¹ requires that:

In the absence of TSIs, and including cases when a derogation has been notified under Article 7, Member States shall send the other Member States and the Commission, for each subsystem, a list of the technical rules in use for implementing the essential requirements.

- 2.2 This document defines the process that has been approved by the Industry Standards Coordination Committee for managing what should be proposed by the GB mainline rail industry to be notified as NTRs, and how derogations from those NTRs are managed. This process will need to be reviewed once the Railways (Interoperability) Regulations 2006 have been revised in order to transpose the Interoperability Directive² agreed in June 2008.

- 2.3 Figure 1 presents a very simplified schematic of the overall process for managing NTRs. The diagram identifies which parts of the process are covered by the annexes to this paper:

- Annex A – identifying and agreeing national technical rules for the GB mainline railway
- Annex B – categorising references to ‘national rules’ included in TSIs
- Annex C – managing derogations from national technical rules

¹ 96/48/EC and 2001/16/EC, as modified by 2004/50/EC

² 2008/57/EC

- Annex D – role of contracting entities in closing open points not addressed by RGSs

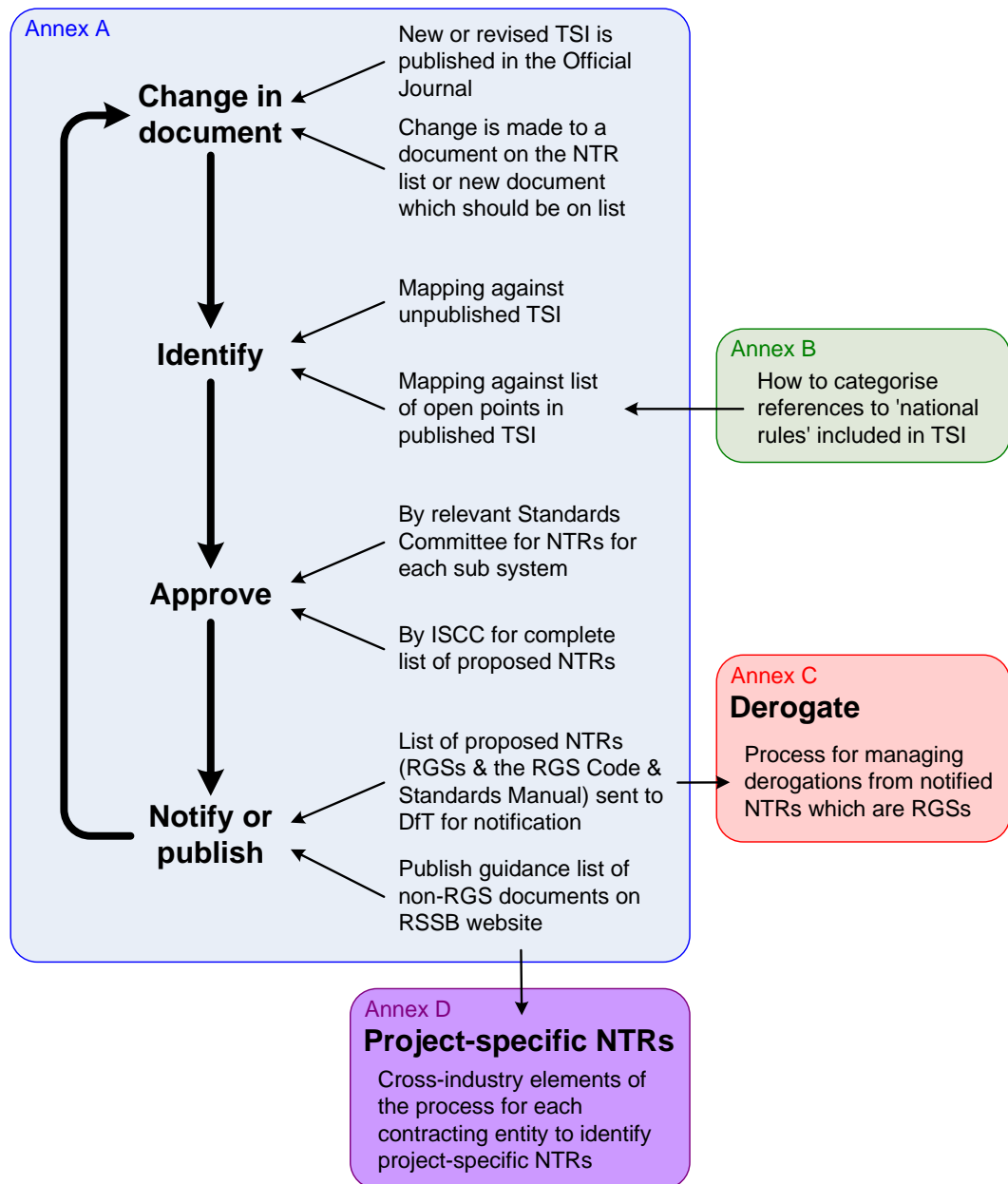


Figure 1: Simplified schematic process for managing national technical rules.

2.4 The key features of the Annex A process for identifying and approving NTRs are:

- The list of NTRs agreed by the Standards Committees needs to include a complete and definitive list of the open points in a published TSI, or the subjects that are expected to be covered once a TSI is published. This defines the scope of what is needed to meet the essential requirements (in addition to the TSI, where one exists).

- b) Only RGSs and the deviation process from the RGS Code should be included on the list of documents proposed to the Department for Transport (DfT) for notification to the European Commission. In other words, only those industry documents which are intended to be mandatory and applied to the mainline railway should be included on the list of documents proposed as NTRs.
- c) A list of documents (eg, Network Rail company standards, ATOC standards, national legislation, industry codes of practice or guidance notes, British Standards, Euronorms) relevant to the open points which are not closed out by RGSs should be published on the RSSB website as guidance for contracting entities to use in proposing project-specific technical rules.

2.5 The Strategy for Standards Management defined a future situation where any open point in a TSI should be filled by a RGS. Where an open point is only partially addressed by the available RGSs, or where there is no RGS on a particular subject but a NTR needs to be notified, a plan should be developed to address the open point. Similarly, wherever a related document is listed against a TSI in the guidance list, there should be an accompanying plan to eliminate the need for this document and either replace it with a RGS, or (depending on timescales) allow the TSI to be revised to close the open point. In both cases, a brief description of the plan should be included in the 'comments' field on the NTR list against the relevant open point. If there is no plan to close the open point with a RGS, perhaps because a new TSI is expected to do so in a short timescale, then this should also be indicated on the NTR list.

ANNEX A – Process for identifying and agreeing national technical rules for the GB mainline railway

1 Purpose of the annex

- 1.1 This annex sets out the process for the identification and agreement of NTRs against the TSIs for the GB mainline railway.

2 The Railways (Interoperability) Regulations 2006

- 2.1 Clause 7 of the Railways (Interoperability) Regulations 2006³ states:

7.—(1) For the purposes of regulations 4(4), 4(6), 8(3)(a), 10(1) and 27(2) the essential requirements for a project subsystem shall be met by conformity with—

(a) all relevant TSIs (if any); and

(b) where paragraph (2) applies, the requirements of all relevant notified national technical rules (if any).

(2) This paragraph applies to the project subsystem, (insofar as it is not subject to requirements by a relevant TSI), where—

(a) there are no relevant TSIs; or

(b) a relevant TSI does not govern all elements of the project subsystem; or

(c) a derogation from conformity with the whole or part of a relevant TSI has been granted pursuant to regulation 6 in respect of that subsystem; or

(d) the Competent Authority has determined under regulation 5(8) that the whole or part of a relevant TSI does not apply to that subsystem.

³ Statutory Instrument 2006 No. 397

3 Published TSIs

- 3.1 Where there is a published TSI, a 'relevant TSI' exists and the regulations declare that the essential requirements are met by conformity with the TSI except where 'a relevant TSI does not govern all elements of the project subsystem'.
[Derogations (Clause 7(2)(c)) and Competent Authority determinations (Clause 7(2)(d)) are outside the scope of this paper.]
- 3.2 The only case when 'a relevant TSI does not govern all elements of the project subsystem' is if it contains a declared 'open point' (that is, a point that is recognised as falling within the scope of the TSI, but for which there is no agreed European requirement). Where a TSI is simply silent on a point, it does not constitute an open point, and no NTR needs to be notified.
- 3.3 If a member state believes that the TSIs do not fully meet the essential requirements (for example, because the TSI is silent on a point that the member state believes should be covered) the Interoperability Directives set out the procedure to be followed:

Article 17:

Where it appears that the TSIs do not fully meet the essential requirements the Committee referred to in Article 21 may be consulted at the request of a Member State or on the initiative of the Commission.

In such a case, the TSIs shall be reviewed in accordance with the procedure referred to in Article 6(2). If certain technical aspects corresponding to the essential requirements cannot be explicitly covered in a TSI, they shall be clearly identified in an Annex to the TSI. Article 16(3) shall apply to these aspects.
- 3.4 The process for identifying the required NTRs in the case of published TSIs may be initiated by either a change to the TSIs or a change to the identified NTRs (for example, as a result of revision to RGSs).

- 3.5 The process for identifying the required NTRs for a published TSI is described below, and indicated diagrammatically in Figure 2:
- a) The TSI is reviewed and declared open points are identified (in more recent TSIs, the open points *should* be specifically listed in an Annex to the TSI, although the accuracy of this annex cannot be relied upon).
 - b) The RSSB technical expert dealing with the relevant sub-system (for example, Energy) will search for an equivalent requirement to each open point in the following documents, listed in decreasing order of preference:
 - i) Railway Group Standards
 - ii) UK legislation
 - iii) Other standards published by organisations in the GB rail industry (for example, ATOC standards or Network Rail company standards)
 - iv) Documents published by the European Railway Agency (for example, in relation to the specification for ERTMS or GSM-R where ERA documents may be more important than RGS)
 - v) Other appropriate documents (for example, GB rail industry codes of practice or guidance notes, British Standards or Euronorms).
 - c) If a suitable RGS requirement is identified (which will usually be the case), RSSB will propose this requirement to be notified as the NTR, citing the specific clause in the RGS and its issue number. If the RGS only partially covers the open point, this should be explained in the 'comments' field on the NTR list together with any proposed actions to close the open point.⁴
 - d) In the absence of a suitable NTR in the form of a RGS, RSSB will produce a list of the documents from b) ii) to b) v). This list is intended to provide guidance to a

⁴ It is understood that, for the Persons of Reduced Mobility TSI, the DfT will notify the code of practice for station design for disabled passengers in respect of a number of references to 'national rules' in that TSI. This is the only non-RGS document that will be notified as applicable to all relevant projects.

contracting entity who will need to develop project-specific NTRs in the absence of a RGS to address the open point.

- e) For each open point which is not closed out by specific clauses from a RGS, the following text should be included in the 'comments field' in the list of NTRs against that open point (this text is *not* the NTR for that open point):

'The contracting entity shall propose how they are to meet the essential requirements in respect of this open point in the TSI. Guidance as to how this open point may be addressed is available on the RSSB website at <http://www.rssb.co.uk/europe/ntr.asp>.

The contracting entity shall seek the views of the relevant RSSB Standards Committee(s). The proposed mechanism for meeting the essential requirements shall then be submitted to the Department for Transport for notification to the European Commission.'

- f) Once RSSB has identified proposed NTRs and any other related documents for a published TSI, these are approved by the relevant Standards Committee(s) and then endorsed by ISCC.
- g) RSSB then advises the DfT of the industry's recommended proposal for the NTRs to be notified to the European Commission and publishes the list of related documents on the RSSB website.

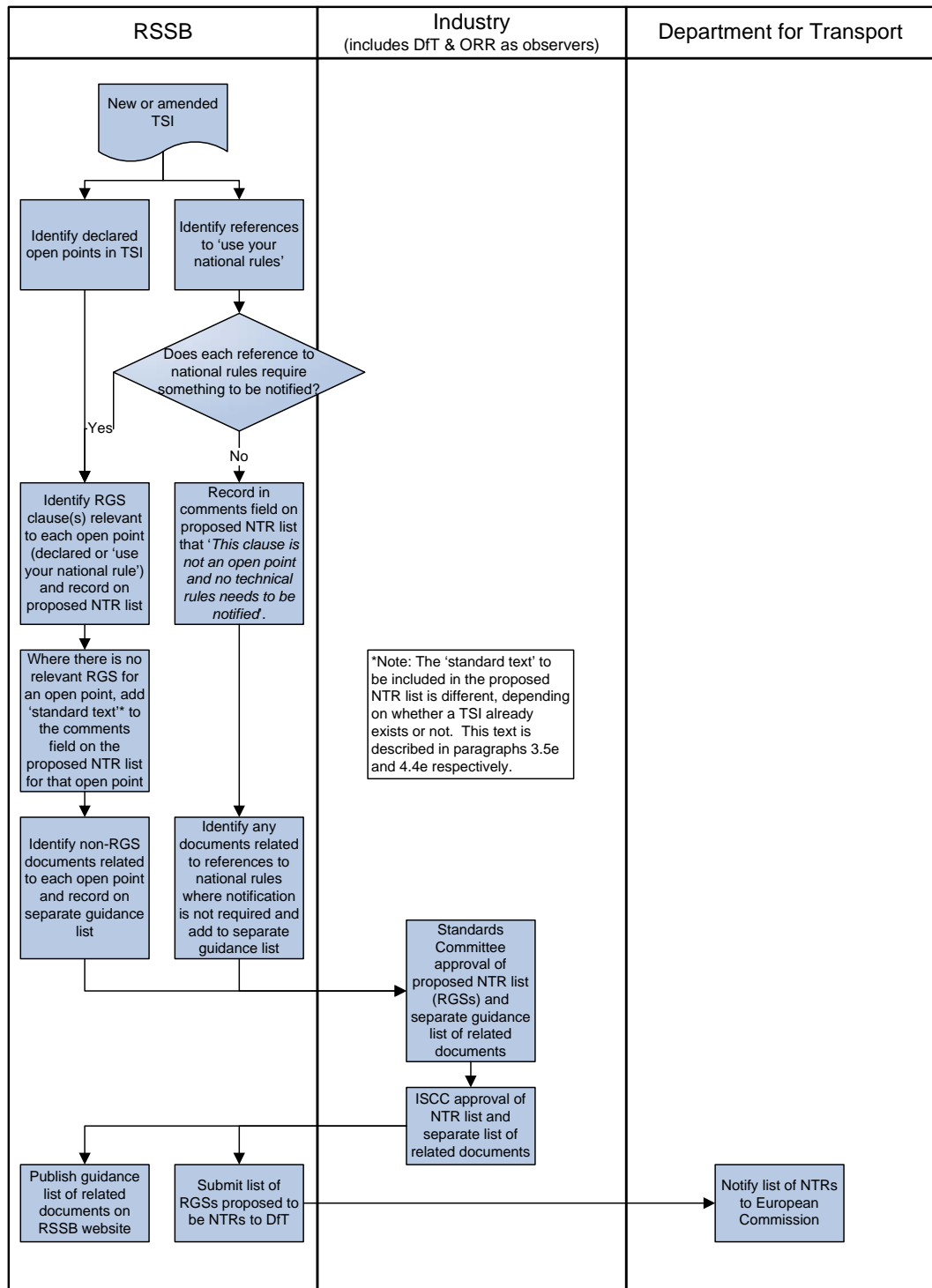


Figure 2: Process for managing national technical rules to fill open points in TSIs.

4 TSIs not yet published

- 4.1 In this case, there is no 'relevant TSI' and the essential requirements are met by complying with notified NTRs. The notified NTRs therefore need to be 'complete'. The difficulty in the case of TSIs that are not yet published is therefore in defining the

scope of the missing TSIs to ensure the notified NTRs are in fact 'complete' – that they will deliver the essential requirements.

- 4.2 Once the scope of the missing TSI is defined (that is, the list of requirements the published TSI is likely to contain), a similar procedure as for published TSIs can be followed to identify NTRs and associated non-mandatory rules.
- 4.3 Demonstrating the 'completeness' of the set of notified NTRs from first principles would be very difficult. However, in practice, defining the scope of missing TSIs, and therefore the set of NTRs that need to be notified, is relatively straightforward.
- 4.4 The process for identifying the required NTRs for a TSI which has not yet been published is described below:
 - a) The RSSB technical expert dealing with the relevant sub-system (for example, Energy) identifies the requirements the missing TSI is likely to contain once it is published (its scope) based on the following sources of data:
 - Published High Speed TSIs covering the same sub-system
 - Available drafts of the unpublished TSIs
 - Experience and knowledge of the GB experts involved in development of the TSIs.
 - b) The RSSB technical expert then searches for an equivalent requirement in the following documents, listed in decreasing order of preference:
 - i) Railway Group Standards
 - ii) UK legislation
 - iii) Other standards published by organisations in the GB rail industry (for example, ATOC standards or Network Rail company standards)
 - iv) Documents published by the European Railway Agency (for example, in relation to the specification for ERTMS or GSM-R where ERA documents may be more important than RGS)
 - v) Other appropriate documents (for example, GB rail industry codes of practice or guidance notes, British Standards or Euronorms).

- c) If suitable RGS requirements are identified (which will usually be the case), RSSB will propose the RGS(s) containing the requirements to be notified as the NTR(s), citing the issue number. If the RGS only partially covers the open point, this should be explained in the 'comments' field on the NTR list together with any proposed actions to close the open point.
- d) In the absence of a suitable NTR in the form of a RGS, RSSB will produce a list of the documents from b) ii) to b) v). This list is intended to provide guidance to a contracting entity who will need to develop project-specific NTRs in the absence of a RGS to address the open point.
- e) For any issue which the TSI is expected to cover but which is not closed out by a RGS, the following text should be included in the 'comments field' in the list of NTRs against that issue (this text is *not* the NTR for that open point):

'The contracting entity shall propose how they are to meet the essential requirements in respect of this issue. Guidance as to how this issue may be addressed is available on the RSSB website at <http://www.rssb.co.uk/europe/ntr.asp>.

The contracting entity shall seek the views of the relevant RSSB Standards Committee(s). The proposed mechanism for meeting the essential requirements shall then be submitted to the Department for Transport for notification to the European Commission.'

- f) Once RSSB has identified proposed NTRs and any other related documents for an unpublished TSI, these are approved by the relevant Standards Committee(s) and then endorsed by ISCC.
- g) RSSB then advises the DfT of the industry's recommended proposal for the NTRs to be notified to the European Commission and publishes the list of related documents on the RSSB website.

ANNEX B – Process for categorising references to ‘national rules’ included in Technical Specifications for Interoperability

1 Purpose of the annex

- 1.1 This annex sets out the process for the categorisation of references to ‘national rules’ included in TSIs, including whether a NTR needs to be notified for each category of ‘national rule’.

2 ‘National rules’

- 2.1 On occasion, TSIs require the use of ‘national rules’, without these being linked to an explicitly declared open point. The exact words used are very variable, but the intention is usually clear. Examples from the first published version of the HS INS TSI include:

- national rules in application
- legislative and regulatory texts enacted by the Member States
- requirements of the national legislation
- national regulations
- applicable legislation ... defined by each Member State
- national rules
- Member State shall define ... the rules
- national regulatory provisions ... and associated provisions
- national regulations of the Member State
- the applicable national regulations
- The Member State ... shall set the parameters ... and the limits to be met by those parameters
- limit values defined by the Member State
- specific requirements ... notified to the adjudicating entity [= contracting entity], or to the Infrastructure Manager, by the authority responsible for authorising the line to be put into service
- provisions set by national laws or rules in application on the territory of the Member State

- 2.2 The exact terminology used in the TSI is not always significant. Reference to ‘national regulations’ should not be assumed to be a reference to a regulation in the UK sense of ‘secondary legislation’. The drafting of the TSI may have been undertaken by experts used to an environment where the member state sets

prescriptive rules (standards) to be complied with by Infrastructure Managers and Railway Undertakings, and who do not have English as their first language.

- 2.3 Note that the term ‘national rule’ is *not* used here as a synonym for ‘notified national technical rule’, ‘national technical rule’ or ‘national safety rule’.

3 Need to notify ‘national rules’

- 3.1 Some ‘national rules’ are required to meet the essential requirements (that is, they are inherently associated with the interfaces) and some are not (that is, they are associated with meeting national legislation without precluding operation of TSI compliant trains). Those ‘national rules’ that are required to meet essential requirements should be notified, as there is effectively an open point in the TSI which is not correctly identified (that is, the TSI should have said ‘this is an open point’, rather than ‘use your national rules’).
- 3.2 The following process is to be used to categorise ‘national rules’ and, subsequently, to determine which references to ‘national rules’ require a NTR to be identified (and subsequently notified) in order to meet the essential requirements and fill the (not correctly identified) open point.

4 Categories of ‘national rules’

- 4.1 Category 1: ‘National rules’ applicable to ‘non-standard’ technologies, technologies with limited application and other cases where there are no common European requirements
- a) These ‘national rules’ generally apply to ‘non-standard’ technologies or technologies with limited application, where no common European requirements have been established. Infrastructure examples are cant deficiency limits for tilting trains, slab track and underground stations.
 - b) Notification of these ‘national rules’ **is required**, because they are effectively covering an open point relating to an interface, and they are required to deliver the essential requirements for the technologies concerned.
 - c) *Example:*
‘On lines, the radii of which have been defined on the basis of the cant deficiency values in the above table, interoperable high-speed trains equipped with special

mechanisms (tilting) may be admitted to run with higher cant deficiency values, provided that adopting such values for those trains does not bring about restrictions for other interoperable trains. The maximum cant deficiency value shall be fixed, in the case of trains equipped with particular mechanisms (tilting trains inter alia), for each interoperable line, by application of the national regulations for the type of train concerned; the value applied shall be published in the Infrastructure Register of the line concerned.'
(Current HS INS TSI, section 4.3.3.8.(a), cant deficiency on plain track and on the main track of switches and crossings)

4.2 Category 2: 'National rules' used to define required levels of safety, reliability or availability

- a) This use of 'national rules' is used to say something about the level of safety, reliability or availability to be achieved. It recognises that different countries define acceptable safety, reliability and availability levels in different ways (though generally achieving the same level of performance).
- b) Notification of these 'national rules' **is required**, because they affect the 'safety' or 'reliability and availability' essential requirement.
- c) *Example:*
'The cross wind safety target to be met and the rules for proving conformity shall be in accordance with national standards. The rules for proving conformity shall take into account the characteristic wind curves defined in the High-Speed Rolling Stock TSI' (draft revised HS INS TSI, section 4.2.17, Effect of crosswinds).

4.3 Category 3: Reminders that certain 'national rules' need to be adapted to take account of interoperable trains / infrastructure

- a) This use of 'national rules' is typically of the form 'You need a rule about X. The rule must take account of the characteristics of interoperable trains / infrastructure'. In most cases, there will already be a relevant rule and this reference is essentially a reminder to adapt rules to take account of interoperability.

- b) Notification of these 'national rules' **is not required**, because the rules concerned relate to the responsibilities of individual duty holders. As such they do not affect an interface, and therefore do not deliver an essential requirement.
- c) *Example:*
'On existing lines upgraded for high-speed and on connecting lines, the Infrastructure Manager or his delegate shall apply the national regulatory provisions, for road level crossings and associated provisions which are appropriate to limit collisions with road vehicles as defined by the Member State. These national rules shall take into account, where required, the crash resistance characteristics of interoperable vehicles as defined in the rolling stock TSI, Point 4.1.7(b) and Annex A.' (current HS INS TSI, section 4.3.3.25. Access to or intrusions into the line installations)

4.4 Category 4: 'National rules' associated with the transposition of horizontal directives into national legislation

- a) This use of 'national rules' is used to draw attention to the national legislation transposing a horizontal directive. By implication, there are no additional 'vertical' requirements that need to be dealt with by TSIs.
- b) Notification of these 'national rules' **is not required**, because these rules are merely the formal national expression of a common European requirement.
- c) *Example:*
'By application of Council Directive 85/337/EEC concerning the assessment of the effects of certain projects on the environment, during the design of a line specially built for high-speed or on the occasion of line upgradings for high-speed the environmental impacts of the projects must be addressed in a preliminary study in accordance with the requirements of the national legislation of the State concerned enacted to apply the Community provisions' (Current HS INS TSI section 4.2.3.1.1).

4.5 Category 5: Compliance with 'national rules' as sufficient for meeting the essential requirements and interoperability

- a) This use of 'national rules' is used to indicate that there are no special requirements to meet the essential requirements or ensure interoperability, and that a railway, provided it complies with the other requirements of the TSI, will automatically be interoperable in respect of the parameter concerned, simply because it would require a perverse effort to do otherwise. The reference is included for completeness.
- b) Notification of these 'national rules' **is not required**, because they do not need to be assessed in order to meet the essential requirements or ensure interoperability.
- c) *Example:*
'The requirements set out in national rules for the running of trains other than trains complying with the High-Speed Rolling Stock TSI are sufficient to ensure the resistance of the track to interoperable traffic loads.' (draft revised HS INS TSI, section, 4.2.13.2, Lines of category II and III)

5 Process for reviewing each published TSI

- 5.1 Occurrences within the published TSIs that call for the use of 'national rules' in some form or other, and which are not associated with an explicitly declared open point, need to be identified.
- 5.2 These occurrences need to be categorised in accordance with the system outlined in section 4 above.
- 5.3 Occurrences falling into Category 1 or Category 2 require an appropriate NTR to be identified using the process described in Annex A for open points in published TSIs.
- 5.4 If a particular use of 'national rules' in a TSI is found that does not fit one of the five categories set out in section 4 above, consideration will need to be given to revising the categorisation system. Any such occurrences should be advised to Adam Milligan, Head of Systems Coordination, for review.

ANNEX C – Process for managing derogations from national technical rules

1 Purpose of the annex

- 1.1 This annex sets out the process for managing derogations from NTRs which have been notified against the TSIs for the GB mainline railway.

2 The future

- 2.1 A new chapter is needed in the Standards Manual to describe how the process for managing deviations from RGSs applies to derogations from NTRs which are RGSs. This chapter will need to define who can receive a derogation against a NTR (this is wider than just infrastructure managers or railway undertakings) and to address the process for derogations associated with interim statements of verification.

3 Interim solution

- 3.1 Until the new chapter of the Standards Manual is published, the sections of the RGS Code and the Standards Manual that define the process for managing derogations from RGSs are to be notified against every TSI that has open points. This RGSs process is to be used for managing derogations against the NTRs which are RGSs, with any such derogations approved by the relevant Standards Committees.⁵
- 3.2 Open points not addressed by RGSs or the code of practice for station design for disabled passengers are to be closed out by each contracting entity for their specific project, hence no derogation process is needed for the NTRs associated with these open points.

⁵ For the Persons of Reduced Mobility TSI, the code of practice for station design for disabled passengers (which will be notified by the DfT) contains its own deviations process which is to be used where a project wishes to deviate from the requirements contained therein.

ANNEX D – The role of contracting entities in closing open points not addressed by RGSs

1 Purpose of the annex

- 1.1 This annex sets out the cross-industry elements of the role of contracting entities in closing open points not addressed by RGSs.

2 Background

- 2.1 In order for a project to be authorised by the Office of Rail Regulation under The Railways (Interoperability) Regulations 2006, there must be a 'complete' set of notified technical rules which addresses all of the open points in the TSIs against which that project is seeking authorisation.

3 The process

- 3.1 The cross-industry elements of the process for each contracting entity to identify the required project-specific technical rules is described below, and indicated diagrammatically in Figure 3:
- a) The list of NTRs agreed by the Standards Committees includes a complete and definitive list of the open points for each published TSI, or the subjects that are expected to be covered once a TSI is published. This defines the scope of what is needed to meet the essential requirements (in addition to the TSI, where one exists). For those open points, if any, which are not closed by a national technical rule applicable to all projects, each contracting entity needs to determine how they are going to close out the open point(s) relevant to their specific project.
 - b) The DfT would welcome contracting entities engaging with the DfT at an early stage of a project in order to assist with any European derogations that might arise, so that DfT can be aware of the various interoperable projects that are underway, and so the DfT can consider whether the proposed way forward for that project could be judged by the European Commission as introducing a barrier to interoperability.
 - c) Once the contracting entity has determined how they are intending to close out any relevant open points, they need to produce a document, based on a

template available on the RSSB website⁶, which describes the proposed way forward.

- d) This document describing the project-specific technical rules is then submitted via RSSB to the relevant Standards Committee(s) who will provide independent comment on the approach.⁷ The Chairman of the relevant Standards Committee(s), or RSSB on their behalf, will write to the contracting entity in order to provide a written record of the opinion of the committee(s).
- e) In the event that a Standards Committee suggests that a Contracting Entity's proposed technical solution is not advisable for some reason, it is up to the contracting entity to determine what change, if any, they may wish to make to the proposed technical rules and if they wish to seek further views from the Standards Committee regarding any change.
- f) Following consideration by the Standards Committee(s), the contracting entity submits their project-specific technical rules to the DfT for notification, including the written record of the opinion of the relevant Standards Committee(s) (either as the note from the Chairman or, if available, the approved minutes).

3.2 Following this process, RSSB will consider whether the project-specific technical rules could form the basis for a RGS which could then be used to close the open point for future projects on the GB mainline railway. Any proposal resulting from this consideration would be progressed in accordance with the RGSs Code.

⁶ The template is available from <http://www.rssb.co.uk/europe/ntr.asp>

⁷ The Standards Committee is not expected to formally 'approve' the proposed project-specific technical rules, as they have no remit to do so. The Standards Committee's role is to comment, from a cross-industry perspective, on the technical aspects of the proposed technical rules and to highlight areas where the project's proposed approach may bring it into conflict with existing industry standards (either TSIs or RGSs). The Standards Committee could also provide comment on whether the proposed technical rules may be appropriate as the basis for a new RGS, which could subsequently be notified as a NTR for all projects.

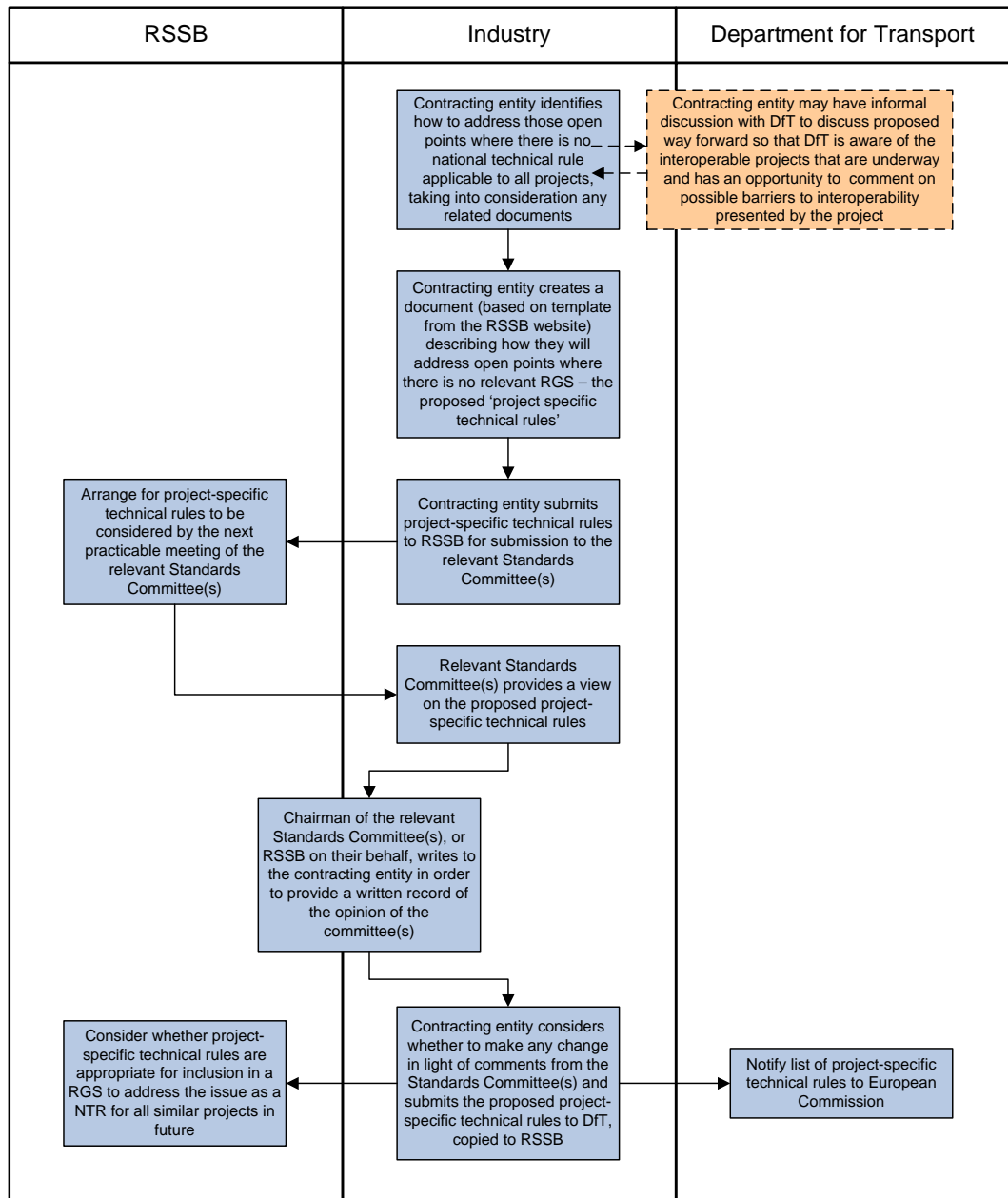


Figure 3: The cross-industry elements of the process for each contracting entity to identify project-specific technical rules to close out those open points where there are no RGSs.