# 20-007 RIS-0703-CCS Signalling layout and signal aspect sequence requirements

This business case for change has been developed to support standards committees in taking decisions related to changes to standards, it includes an assessment of the predicted impacts arising from the change.

### Revised document(s)

| Number | Title | Issue |
|---|---|---|
| RIS-0703-CCS | Signalling layout and signal aspect sequence requirements | 2 |

### Superseded document(s)

| Number | Title | Issue |
|---|---|---|
| RIS-0703-CCS | Signalling layout and signal aspect sequence requirements | 1.1 |

# Summary

## Background and change

RIS-0703-CCS issue 1.1 was published in 2018 to provide industry with requirements for integrating the lineside signalling system with train operations and guidance on their application. Conformity with the requirements is consistent with providing a lineside signalling system that is driveable. The requirements were derived from the historical practice on the GB mainline railway.

Network Rail has advised that its Signalling Design Handbook NR/L2/SIG/19609 is out of date, and much of its valid content is also contained in RIS-0703-CCS. Including further relevant content from NR/L2/SIG/19609 in RIS-0703-CCS has the benefit of eliminating inconsistencies between the documents and provide a single source document for designers of signalling layouts and signal aspect sequences requirements. In addition, the suppliers have identified that clarifying requirements and providing additional guidance would help in their demonstration of compliance.

## Industry impact due to changes

| Impact areas | Scale of impact | Estimated value £ 000's |
|---|---|---|
| A. Legal compliance and assurance | N/A | - |
| B. Health, safety and security | N/A | - |
| C. Reliability and operational performance | N/A | - |
| D. Design and maintenance | Medium | £1,200,000 over a five year period |
| E. People, process and systems | Low | Not proportionate to quantify |
| F. Environment and sustainability | N/A | - |
| G. Customer experience and industry reputation | Low | Not proportionate to quantify |
| **Total value of industry opportunity =** | | **£1,200,000 over a five year period** |

| The standards change contribution to the total value of industry opportunity | | | | |
|---|---|---|---|---|
| ☐ None or low | ☑ Minor but useful | ☐ Moderate | ☐ Important / essential | ☐ Urgent / critical |

# Detail

## 1. What were the objectives associated with this change?

**Objective 1 – Incorporate industry good practice in the design of junction signalling layouts**

1.1 Incorporate content from Network Rail's Signalling Design Handbook NR/L2/SIG/19609 into RIS-0703-CCS issue two and update the requirements and guidance on the design of junction signalling layouts and junction aspect sequences to incorporate the changes to signalling system design practice since NR/L2/SIG/19609 was last updated.

1.2 This objective was based on a request from Network Rail to have the signalling layout and signal aspect sequence requirements from its handbook incorporated into RIS-0703-CCS. This has enabled Network Rail to withdraw NR/L2/SIG/19609 which has removed the potential for inconsistencies with the RIS to arise.

**Objective 2 – Develop requirements and improve rationale and guidance to support compliance**

1.3 Revise the requirements, rationale and guidance in RIS-0703-CCS to support signalling system suppliers in demonstrating compliance with signalling layouts and signal aspect sequence requirements. This objective was identified from a 12-month review of RIS-0703-CCS and supplier feedback (minute number 19CCS05099).

## 2. How has the content in the standard changed to achieve the objectives?

**Objective 1 – Incorporate industry good practice in the design of junction signalling layouts**

2.1 The content in RIS-0703-CCS has been reviewed and updated to include additional requirements, rationale and guidance on colour light junction signalling layouts and junction aspect sequences. The changes to RIS-0703-CCS will supersede the content in NR/SIG/L2/19609 and so has been withdrawn by Network Rail.

2.2 The opportunity has been taken to update and clarify the requirements and guidance on colour light junction signalling layouts and junction aspect sequences to reflect current good practice. This includes changes to requirements and guidance for the application of banner repeater indicators, banner junction indicators and preliminary route indicators, and the application of digital technology to colour light signalling systems.

2.3 Consultation comments received from Network Rail resulted in further changes to guidance to reflect good practice in the application of lamp proving controls to lineside signalling systems that are configured using lighting technology with known high reliability. The guidance on lamp proving controls provided with indicators that repeat signal aspects and junction indications has been updated to simplify the arrangements and remove unnecessary constraints.

2.4 The disposition table in Appendix A sets out the detail of the changes made to the requirements, rationale and guidance in RIS-0703-CCS.Objective 2.

**Objective 2 – Develop requirements and improve rationale and guidance to support compliance**

2.5 RIS-0703-CCS has been updated throughout to remove ambiguity in the interpretation of existing requirements and to provide additional guidance and rationale to support compliance.

2.6 The disposition table in Appendix A identifies the changes made in addressing these issues.

## 3. How urgently did the change need to happen to achieve the objectives?

3.1 No priority was set for this project, however early publication of the standard will enable the benefits to be achieved and help suppliers with compliance.

## 4. What are the positive and negative impacts of implementing the change?

### Justification of impact, scale and quantification for the seven impact areas

#### A. Legal compliance and assurance

4.1 The changes to RIS-0703-CCS are not directly relevant to legal compliance and assurance and no benefit is claimed.

#### B. Health, safety and security

4.2 The changes to RIS-0703-CCS are not directly relevant to health, safety and security and no benefit is claimed.

#### C. Reliability and operation performance

4.3 The changes to RIS-0703-CCS are not directly relevant to reliability and operation and no benefit is claimed.

#### D. Design and maintenance

4.4 The changes to RIS-0703-CCS are intended to provide increased clarity for those undertaking the design of lineside signalling layouts and signal aspect sequences and eliminate potential design inefficiencies resulting from inconsistency between RSSB standards and Network Rail standards.

4.5 It is considered in the absence of data, that removing these inefficiencies would result in a complex signalling design project saving the equivalent of one day's effort of a signalling design engineer at £800 per day and that one hundred complex signalling projects were

undertaken per year then this would represent a value of £80,000 per year which is equivalent to £400,000 over a five-year period.

4.6 The provision of updated requirements and guidance to reflect current good practice in the design of colour light junction aspect sequences enables greater flexibility in the design of junction signalling layouts and improve driveability at locations where the readable distance of a junction signal requires provision of a repeater.

4.7 The provision of updated requirements and guidance to reflect current good practice in the application of digital technology to colour light signalling systems will enable simplification of signalling system controls.

4.8 Developing RIS-0703-CCS issue two to support suppliers in demonstrating compliance with requirements will have the potential to reduce the effort needed in providing the supporting justification.

4.9 It is considered, in the absence of data, that simplifying the demonstration of compliance saves a supplier a day's effort per project and that, across the industry, this could save of the order of 200 days of effort per year, then at £800 per day this represents a value of £160,000 per annum which is equivalent to £800,000 over five years.

4.10 The combination of the benefits to suppliers and signal layout designers from this standard change project is a value of £1,200,000 over a five-year period.

**E. People, process and systems**

4.11 By incorporating relevant content from the now withdrawn Network Rail's Signalling Design Handbook NR/L2/SIG/19609 into RIS-0703-CCS issue two there will be a benefit to Network Rail in reducing its maintenance of the document and keeping it aligned with other relevant standards. However, the value of this benefit is considered to be low, and it is judged not proportionate to quantify.

**F. Environment and sustainability**

4.12 The changes to RIS-0703-CCS are not directly relevant to environment nor sustainability and no benefit is claimed.

**G. Customer experience and industry reputation**

4.13 The changes to RIS-0703-CCS are not directly relevant to customer experience nor industry reputation and no benefit is claimed.

## 5. What is the contribution of this standards change in realising the value to industry opportunity?

5.1 It is judged that the changes resulting from this project have the potential to provide an estimated cost benefit to the industry of £1,200,000 over a five-year period, by eliminating inefficiencies resulting from inconsistencies and supporting the demonstration of compliance. As this potential benefit would be achieved as a result of

the changes incorporated into RIS-0703-CCS issue two, the standard change is categorised as minor but useful.

## 6. What was the effort required by RSSB to make the change?

6.1 The key resources for this project are a CCS Technical Specialist supported by a Project Manager and other administrative functions as appropriate.

## 7. Did RSSB deliver against industry's expected timescales?

7.1 The project has met the planned publication date.

## 8. How will the industry implement the change?

8.1 It is the intention that RIS-0703-CCS issue two will be adopted by the infrastructure manager and will be used by Network Rail in place of its procedure the now withdrawn NR/L2/SIG/19609. The revision to RIS-0703-CCS will reflect current good practice and will not change the existing signalling design principles.

8.2 The updated content on the application of splitting banner repeater indicators, banner junction indicators and lamp proving controls will form a part of a briefing pack, developed in collaboration with Network Rail.

## 9. How will RSSB assess whether the change is achieving the objectives?

9.1 RSSB will seek industry feedback at the 12-month review from specific projects and suppliers on their experience in using RIS-0703-CCS issue two.

## Appendix A Disposition Table

**Table A1: Disposition of RIS-0703-CCS issue 1.1**

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| **1.1** | **Purpose** | | | |
| 1.1.1 | 1.1.1 | Revised | Wording removed '…,for members of RSSB to use if they so choose'. | 2 |
| 1.1.2 | 1.1.2 | Revised | Clause simplified – references to 'route compatibility assessment' and 'incompatibility' removed | 2 |
| | 1.1.3 | New | New clause to explain that the requirements do not take account of all hazards that may arise on lines fitted with a lineside signalling system when trains are operated using a cab signalling system, for example ERTMS/ETCS | 2 |
| | 1.1.4 | New | New clause stating that the document can be adopted by infrastructure managers under their respective safety management system or when specifying products and services. | |
| **1.2** | **Application of this document** | | | |
| 1.2.1 | 1.2.1 | No change | | |
| 1.2.2 | 1.2.2 | No change | | |
| **1.3** | **Introduction** | | | |
| 1.3.1 | 1.3.1 | Redrafted | Wording 'compatibility' replaced by 'safe integration' | 2 |
| 1.3.2 | 1.3.2 | Revised | New clause explaining how the requirements in this document can be applied, in conjunction with a risk assessment, to control the following hazard precursors and inform a decision on whether the lineside signalling system is driveable. A list of the driveability hazard precursors is provided. The hazard precursors are referenced from the rationale provided with each requirement. | |
| | 1.3.3 | New | Cross reference to RIS-0713-CCS which sets out further requirements and guidance on driveability. | |
| 1.3.3 | 1.3.4 | Revised | Clause rewritten to incorporate guidance from NR/L2/SIG/19609 section 1 to recognise the importance of maintaining a balance of risk control vs train performance. | 1 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| 1.3.4 | 1.3.5 | Revised | Clause revised to explain that well-designed signalling system supports safe integration with train driving (driveability). Reference to definition of driveability added | 2 |
| | 1.3.6 | New | New clause that states that a well-designed signalling system implements features that support the control of risks, enable train performance and optimise infrastructure capacity | 2 |
| 1.3.5 | 1.3.7 | Revised | The words 'poor compatibility with train operations' replaced with 'poor driveability' | 2 |
| 1.3.6 | | Deleted | Duplicates guidance in 1.3.4 | |
| 1.3.7 | 1.3.8 | Revised | Wording revised to clarify that changes to the lineside signalling system are assessed 'before they are put into use.' | 2 |
| 1.3.8 to 1.3.12 | 1.3.9 to 1.3.13 | Renumbered | No change | |
| 1.3.13 | 1.3.14 | Revised | First sentence extended to state that 'further risk controls are implemented using a train protection system; for example, AWS/TPWS.' | 2 |
| 1.3.14 to 1.3.16 | 1.3.15 to 1.3.17 | Renumbered | No change | |
| 1.3.18 | 1.3.18 | Revised | Standards references updated | 2 |
| **1.4** | **Health and safety responsibilities** | | | |
| 1.4.1 | 1.4.1 | No change | | |
| **1.5** | **Structure of this document** | | | |
| 1.5.1 & 1.5.2 | 1.5.1 & 1.5.2 | No change | | |
| **1.6** | **Approval and authorisation** | | | |
| 1.6.1 | 1.6.1 | Revised | Publication date | 2 |
| 1.6.2 | 1.6.2 | Revised | Authorisation date | 2 |
| | | | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| **2.1.1** | **Provision of lineside signals** | | | |
| 2.1.1.1 | 2.1.1.1 | Redrafted | Requirement clarified that on lines where trains are operated using a lineside signalling system, lineside signals shall be provided to authorise the train movements specified in the operating specification | 2 |
| G 2.1.1.2 | G 2.1.1.2 | Redrafted | Movement authority (MA) written out in full | 2 |
| G 2.1.1.3 | G 2.1.1.3 | Revised | Reference to train driving procedures replaced by guidance on driveability | 2 |
| G 2.1.1.4 | G 2.1.1.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.1.1.5 to G 2.1.1.7 | | No change | | |
| | G 2.1.1.8 | New | New guidance clause to explain that driveability assessment includes transitions between one method of block signalling to another | 2 |
| G 2.1.1.8 | G 2.1.1.9 | Revised | Addition sentence referencing the requirements for block systems in GKRT0055 | 2 |
| G 2.1.1.9 | | Deleted | Clause deleted as unnecessary | 2 |
| G 2.1.1.10 a) | G 2.1.1.10 a) | Revised | The term ‘full MA’ replaces ‘non-permissive MA’ to describe a movement authority that authorises a train movement into an unoccupied signal section | 2 |
| G 2.1.1.10 b) | G 2.1.1.10 c) | Revised | Guidance on shunting MA amended to remove reference to ‘permissive or non-permissive’ and explain that a shunt aspect ‘authorises a shunting movement into a signal section, or along any line that may be occupied or clear. The train driver is responsible for stopping the train clear of any obstruction’ | 2 |
| G 2.1.1.10 c) | G 2.1.1.10 b) | Revised | The term ‘on-sight MA’ replaces ‘permissive MA’ to describe a movement authority that authorises a permissive train movement into an occupied signal section | 2 |
| G 2.1.1.10 d) | G 2.1.1.10 d) | Revised | Guidance on PoSA MA amended to clarify that ‘the train driver is responsible for stopping the train clear of any obstruction’ | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | G 2.1.1.11 | New | A new guidance clause including a table describing the relationship between the type of MAs, the classes of route and the type of signal aspect. | 2 |
| | G 2.1.1.12 | New | New guidance including a table to describe the relationship between type of MA, class of signal route and type of signal aspect | 2 |
| G 2.1.1.11 | G 2.1.1.12 | Redrafted | Guidance on the coverage of a lineside signalling system on a line where some trains are operated using ETCS redrafted as a statement of fact rather than implying a permission | 2 |
| G 2.1.1.12 | G 2.1.1.13 | Redrafted | Guidance redrafted to align with the revised terms used for MAs and classes of route. | 2 |
| **2.1.2** | **Cancelling and reissuing a signalled movement authority** | | | |
| 2.1.2.1 | 2.1.2.1 | Revised | Wording in clause b) amended to clarify that the requirement applies to any signal that forms part of a standard cautionary aspect sequence that could change to show a more restrictive display | 2 |
| G 2.1.2.2 | G 2.1.2.2 | Redrafted | Requirement reference added | 2 |
| G 2.1.2.3 to G 2.1.2.4 | G 2.1.2.3 to G 2.1.2.4 | No change | | |
| G 2.1.2.5 | G 2.1.2.5 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| | G 2.1.2.6 | Renumbered | No change | |
| G 2.1.2.6 | G 2.1.2.7 | New | Additional guidance to provide examples of a more restrictive route indication | 2 |
| G 2 1.2.7 | G 2.1.2.8 | Revised | Guidance updated to describe three types of approach locking. G 2.1.2.8 c) is a new subclause to describe selective comprehensive approach locking | 2 |
| G 2.1.2.8 to G 2.1.2.11 | G 2.1.2.9 to G 2.1.2.12 | Renumbered | No change | |
| G 2.1.2.12 | G 2.1.2.13 | Revised | Clause b) amended to clarify that the train causes the train detection system to activate the route locking beyond that signal. | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.1.2.13 | G 2.1.2.14 | Revised | The approach locking release time for each stop signal takes account of signal spacing, the possible variation in position of the train between consecutive signals when the MA is cancelled. | 2 |
| **2.1.3** | | Revised | The title is changed from 'Signalled MAs towards defective signals' to **Proving of signal aspects and indications.** Section 2.1.3 is revised in its entirety. | 1 and 2 |
| 2.1.3.1 | G 2.1.3.1 | Moved to guidance | The requirement is withdrawn as it duplicates the requirements for showing a stop aspect (section 2.3.1), a cautionary aspect sequence (section 2.7.2) and, at a diverging junction, a route indication (section 3.1.1.1). | 1 and 2 |
| G 2.1.3.2 | G 2.1.3.1 | Revised | Updated guidance on the capability of the lineside signalling system to reliably show correct and complete sequences of signal aspects and indications and the two failure scenarios that adversely impact on this capability in the operational context. | 1 and 2 |
| G 2.1.3.3 | G 2.1.3.7 | Revised | The guidance is updated and expanded to explain the impact on driveability and consequences arising from a lamp failure and the reason for implementing lamp proving capability | 1 and 2 |
| G 2.1.3.4 | G 2.1.3.2 | Revised | The guidance is updated to provide three examples of failure scenarios that can increase risk | 1 and 2 |
| G 2.1.3.5 | G 2.1.3.2 | Revised | The guidance is updated to provide three examples of failure scenarios that can increase risk | 1 and 2 |
| G 2.1.3.6 | G 2.1.3.7<br>G 2.1.3.9<br>G 2.1.3.10<br>G 2.1.3.11 | Revised | The guidance is updated and expanded to explain the impact on driveability and consequences arising from a lamp failure and the reason for implementing lamp proving capability | 1 and 2 |
| G 2.1.3.7 | G 2.1.3.18 | Revised | The guidance is revised to explain how an existing method of lamp proving is reviewed when an existing signalling system is modified or replaced with an operational equivalent | 1 and 2 |
| G 2.1.3.8 | G 2.1.3.17 | Revised | The guidance is updated to reflect current good practice in omitting lamp proving if the risk of a failure is inconsequential or mitigated by other means | 1 and 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | G 2.1.3.3 | New | Guidance on some factors that influence the risk of an extinguished or corrupted signal aspect or indication | 1 and 2 |
| | G 2.1.3.4 | New | Guidance on the potential causes of a failure | 1 and 2 |
| | G 2.1.3.5 | New | Guidance on using redundancy to improve signalling system availability | 1 and 2 |
| | G 2.1.3.6 | New | Guidance on asset management of lineside signalling equipment | 1 and 2 |
| | G 2.1.3.8 | New | Cross reference to guidance on the driveability hazard precursors in RIS-0713-CCS | 1 and 2 |
| | G 2.1.3.12 | New | Guidance on lamp proving and arm proving capabilities | 1 and 2 |
| | G 2.1.3.13 | New | Guidance on lamp proving technology | 1 and 2 |
| | G 2.1.3.14 | New | Guidance on arm proving technology | 1 and 2 |
| | G 2.1.3.15 | New | Guidance on configuration of lamp proving and arm proving outputs | 1 and 2 |
| | G 2.1.3.16 | New | Guidance on two types of lamp proving control | 1 and 2 |
| | G 2.1.3.19 | New | Guidance on lamp proving controls at a junction signal | 1 and 2 |
| | G 2.1.3.20 | New | Guidance on lamp proving controls provided with a preliminary route indicator (PRI) | 1 and 2 |
| | G 2.1.3.21 | New | Guidance on lamp proving controls provided with a cautionary aspect sequence | 1.and 2 |
| | G 2.1.3.22 and G 2.1.2.23 | New | Guidance on lamp proving controls provided with a banner repeater | 1 and 2 |
| | G 2.1.3.24 | New | Guidance on lamp proving controls provided with a banner junction indicator (BJI) | 1 and 2 |
| **2.2.1** | **Locations where stop signals are required** | | | |
| 2.2.1.1 | 2.2.1.1 | Revised | Revised to clarify that a stop signal is provided at every infrastructure location where a limit of movement authority (MA) protects a signal section on a running line | 2 |
| G 2.2.1.2 to G 2.2.1.6 | G 2.2.1.2 to G 2.2.1.6 | No change | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.2.1.7 | G 2.2.1.7 | Redrafted | The word 'infrastructure' is removed. Reference to signalling record plans as a formal record added | 2 |
| G 2.2.1.8 | G 2.2.1.8 | Redrafted | The term 'infrastructure manager' replaces the term 'IM (Network)' | 2 |
| G 2.2.1.9 | G 2.2.1.9 | Redrafted | Brackets removed from sentence | 2 |
| G 2.2.1.10 | G 2.2.1.10 | Revised | Reference to RIS-3782-TOM added | 2 |
| G 2.2.1.11 | G 2.2.1.11 | No change | | |
| G 2.2.1.12 | G 2.2.1.12 | Revised | Reworded to remove the implication that the guidance is a permission or a requirement. Additional guidance is provided to provide an example of where a separate signal is provided for the return direction. | 2 |
| G 2.2.1.13 | G 2.2.1.13 and G 2.2.1.14 | Revised | Revised to clarify when a stop signal may be provided at a transition from a signalled line to a non-running line and remove the implication of a requirement. Guidance is provided on good practice for the infrastructure manager (IM) to document the agreed train working arrangements with the facility operator. | 2 |
| G 2.2.1.14 | G 2.2.1.15 | Revised | An additional factor c) added to provide guidance that the location of train protection system equipment is relevant to the position of a stop signal for a reversing move | 2 |
| G 2.2.1.15 | G 2.2.1.16 | Revised | Reference to level crossing removed. Guidance that risk assessment is used to evaluate the risk of positioning a stop signal so that part of train would stop within a tunnel, on a viaduct or over catch points. | 2 |
| G 2.2.1.16 | G 2.2.1.17 | Redrafted | Terminology changed to refer to the electric traction system. Cross reference to the route technical compatibility assessment requirements in RIS-8270-RST added | 2 |
| G 2.2.1.17 | G 2.2.1.18 | Revised | Guidance added to b) to reference the signal sighting assessment standard RIS-0737-CCS. Guidance in clause c) extended to include operation of multi-mode trains | 2 |
| | G 2.2.1.19 | New | Reference to RIS-2713-RST | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.2.1.18 and G 2.2.1.19 | G 2.2.1.20 and G 2.2.1.21 | Revised | Guidance on compatibility at ENE subsystem interfaces extended to include the application of lineside operational signs | 2 |
| G 2.2.1.20 to G 2.2.1.23 | G 2.2.1.22 to G 2.2.1.25 | Renumbered | No change | |
| G 2.2.1.24 | G 2.2.1.26 | Revised | Additional sentence 'Where parallel positioning of signals cannot be achieved, signal sighting assessment is used to assess the impact of locating signals that are not parallel.' | 2 |
| G 2.2.1.25 | G 2.2.1.27 | Renumbered | No change | |
| **2.2.2** | **Application of independent shunting signals** | | | |
| 2.2.2.1 | 2.2.2.1 | Redrafted | Requirement 2.2.2.1 b) revised to refer to a shunt MA instead of a shunt aspect | 2 |
| G 2.2.2.2 | G 2.2.2.2 | No change | | |
| G 2.2.2.3 | G 2.2.2.3 | Revised | Guidance simplified to remove reference to a non-permissive MA | 2 |
| G 2.2.2.4 | G 2.2.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.2.2.5 | G 2.2.2.5 | Redrafted | The term Shunt MA is corrected. Final sentence redrafted to make a positive statement that the end of a non-permissive MA is always indicated by a main stop signal. | 2 |
| G 2.2.2.6 | G 2.2.2.6 | Redrafted | Redrafted to make a positive statement about when a preset shunt may be provided | 2 |
| G 2.2.2.7 | G 2.2.2.7 | Redrafted | Redrafted to remove the implication that the final sentence is a permission to provide an independent shunting signal at the exit of a yard or depot. Reference to driveability assessment added. | 2 |
| **2.2.3** | **Identifying a stop signal as an intermediate block home signal** | | | |
| 2.2.3.1<br>G 2.2.3.2 to G 2.2.3.8 | | Withdrawn | The requirements, rationale and guidance on identifying a signal as passable on the train drivers own authority are withdrawn. The rules for a driver to pass a signal on their own authority have been changed to exclude a controlled signal worked from a signal box that is open. (GERT8000 Module S5, issue 10, section 8).<br>Note: The guidance on preset and preceding signals is moved from section 2.4.3 to section 2.2.3 | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| **2.3.1** | The title is changed from 'Presentation of stop aspects' to **Showing the stop aspect.** | | | |
| 2.3.1.1 | 2.3.1.1 | No change | | |
| G 2.3.1.2 | G 2.3.1.2 | No change | | |
| G 2.3.1.3 | G 2.3.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.3.1.4 | G 2.3.1.4 | Redrafted | Changed to state that RIS-0758-CCS sets out further requirements for approach lit signal aspects | 2 |
| **2.3.2** | **Consistency of stop aspect appearance** | | | |
| 2.3.2.1 | 2.3.2.1 | No change | | |
| G 2.3.2.2 | G 2.3.2.2 | No change | | |
| G 2.3.2.3 | G 2.3.2.3 | No change | | |
| G 2.3.2.4 | G 2.3.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.3.2.5 | G 2.3.2.5 | No change | | |
| **2.3.3** | **Indicating the end of a signalled line** | | | |
| 2.3.3.1 | 2.3.3.1 | Redrafted | Requirement is reworded to clarify that the buffer stop at the end of a signalled line shall have the appearance of a stop aspect. | 2 |
| G 2.3.3.2 | G 2.3.3.2 | No change | | |
| G 2.3.3.3 | G 2.3.3.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.3.3.4 | G 2.3.3.4 | Revised | Reference to signal sighting assessment standard RIS-0737-CCS added | 2 |
| **2.4.1** | Title simplified to **'Shunt aspect shown by an independent shunting signal'** | | | |
| 2.4.1.1 | 2.4.1.1 | No change | | |
| G 2.4.1.2 | G 2.4.1.2 | No change | | |
| G 2.4.1.3 | G 2.4.1.3 | Revised | The term 'preceding shunt' is replaced by the term 'preset shunt' | 2 |
| G 2.4.1.4 | G 2.4.1.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.4.1.5 | G 2.4.1.5 | No change | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.4.1.6 | G 2.4.1.6 and G 2.4.1.7 | Redrafted | G 2.4.1.6 provides guidance on the appearance of shunt aspects<br>G 2.4.1.7 provides guidance that a subsidiary proceed aspect can also be used to provide a permissive MA but different interlocking controls and signalling rules apply | 2 |
| G 2.4.1.7 | G 2.4.1.8 | Revised | Reference to permissive shunt and non-permissive shunt deleted. This is because the shunt aspect does not enable the driver to distinguish whether the line is occupied or clear | 2 |
| G 2.4.1.8 | G 2.4.1.9 | Renumbered | No change | |
| G 2.4.1.9 | G 2.4.1.10 | Redrafted | Redrafted to clarify that risk assessment informs a decision to provide an independent shunting signal on a running line | 2 |
| **2.4.2** | **Position of independent shunting signals** | | | |
| 2.4.2.1 | 2.4.2.1 | No change | | |
| G 2.4.2.2 | G 2.4.2.2 | Revised | Rationale revised to clarify that a shunt aspect is not the start of a shunt MA if it is preset by a main aspect | 2 |
| G 2.4.2.3 | G 2.4.2.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.4.2.4 | G 2.4.2.4 | No change | | |
| **2.4.3** | **Guidance on preset and preceding signals** | | | |
| G 2.4.3.1 | G 2.2.3.1 | Revised | Additional guidance that the application of presetting or preceding controls is informed by the signalling layout and the operating specification. | 2 |
| G 2.4.3.2 | G 2.2.3.2 | Revised | Additional guidance with examples of presetting control applications. | 2 |
| G 2.4.3.3 | G 2.2.3.3 | Revised | Additional guidance including figure 1 showing an example of a preset shunt signal | |
| G 2.4.3.4 | G 2.2.3.3 | Redrafted | Guidance encompassed into G 2.2.3.3 | 2 |
| G 2.4.3.5 | G 2.2.3.4 | Revised | Additional guidance including figure 2 showing an example of a shunt signal with preceding controls | 2 |
| **2.4.4** | Renumbered as **2.4.3**. Title simplified to **Aspects shown by independent shunting signals being controlled as pre-set shunts** | | | |
| 2.4.4.1 | 2.4.3.1 | Renumbered | No change | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| 2.4.4.2 | 2.4.3.2 | Revised | Requirement revised to remove reference to a PoSA MA and clarify that the stop aspect shall be shown when the MA towards an independent shunting signal that is being controlled as a pre-set shunt is cancelled | 2 |
| G 2.4.4.3 | G 2.4.3.3 | Renumbered | No change | |
| G 2.4.4.4 | G 2.4.3.4 | Renumbered | No change | |
| G 2.4.4.5 | G 2.4.3.5 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.4.4.6 | G 2.4.3.6 | Renumbered | No change | |
| G 2.4.4.7 | | Withdrawn | Duplicates the guidance on preset shunt signals section 2.2.3. | 2 |
| G 2.4.4.8 | | Withdrawn | Duplicates the guidance on preset shunt signals section 2.2.3. | 2 |
| G 2.4.4.9 | | Withdrawn | Duplicates the guidance on preset shunt signals section 2.2.3. | 2 |
| **2.5.1** | Title changed to **Position light OFF aspect shown at a main stop signal** | | | |
| 2.5.1.1 | 2.5.1.1 | Revised | Requirement revised to omit applicability to a PoSA MA as this is covered in section 2.6. Permissive MA replace by on-sight MA. | 2 |
| | 2.5.1.2 | New | Additional requirement incorporated from NR/L2/SIG/19609 section 8.2 that a main stop aspect shall be shown until the subsidiary proceed aspect and alphanumeric route indication are both interpretable | 1 |
| G 2.5.1.2 | G 2.5.1.3 | Revised | Rationale expanded to cover requirement 2.5.1.2 and to refer to an on-sight MA | 1 and 2 |
| G 2.5.1.3 | G 2.5.1.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.5.1.4 | G 2.5.1.5 and G 2.5.1.7 | Redrafted | Guidance on train detection controls moved to a separate clause G 2.7.1.7 | 2 |
| G 2.5.1.5 | G 2.5.1.6 | Revised | Reference to PoSA MA deleted as this is covered by section 2.6 | 2 |
| G 2.5.1.6 | G 2.5.1.8 | Revised | Guidance provided on using risk assessment to determine the acceptability of providing a shunt MA or a permissive MA along the same line. Reference to 'subsidiary' aspect removed | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.5.1.8 | G 2.5.1.9 | Redrafted | Redrafted to remove the inference that the guidance is a permission to provide a permissive MA and a shunt MA from the same signal for train movements along different lines | 2 |
| | G 2.5.1.10 | New | Guidance on readability performance of position light signals and reference to the requirement for when a main stop signal can clear to show an on-sight MA. | 2 |
| | G 2.5.1.11 | New | Guidance on detecting the location of the train on the approach to a main stop signal that can show a position light aspect | 2 |
| G 2.5.1.9 | G 2.5.1.12 | Renumbered | No change | |
| G 2.5.1.10 | G 2.5.1.13 | Revised | Reference to 'subsidiary signal' deleted | 2 |
| G 2.5.1.11 | G 2.5.1.14 | Renumbered | No change | |
| G 2.5.1.12 | G 2.5.1.15 | Renumbered | No change | |
| G 2.5.1.13 | G 2.5.1.16 | Revised | Permissive MA replace by on-sight MA | 2 |
| G 2.5.1.14 | G 2.5.1.17 | Renumbered | No change | |
| G 2.5.1.15 | G 2.5.1.18 | Renumbered | No change | |
| G 2.5.1.16 | | Deleted | Guidance on PoSA aspects is provided in section 2.6 | 2 |
| **2.5.2** | Title changed to **Banner repeater where the signal shows a position light OFF aspect** | | | |
| 2.5.2.1 | 2.5.2.1 | Revised | Term 'subsidiary signal' changed to 'position light OFF aspect' | 2 |
| G 2.5.2.2 | G 2.5.2.2 | No change | | |
| G 2.5.2.3 | G 2.5.2.3 | Revised | Rationale simplified. Reference to PoSA MA removed | 2 |
| G 2.5.2.4 | G 2.5.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| | G 2.5.2.5 | New | Additional guidance on using risk assessment to deviate from requirement 2.5.2.1 | 2 |
| G 2.5.2.5 | G 2.5.2.6 | Renumbered | No change | |
| **2.5.3** | **Relevant stop signal for showing a permissive aspect** | | | |
| 2.5.3.1 | 2.5.3.1 | Revised | Permissive MA replace by on-sight MA | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.5.3.2 | G 2.5.3.2 | Redrafted | Guidance rewritten to describe how drivers use the permissive aspect | 2 |
| G 2.5.3.3 | G 2.5.3.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.5.3.4 | G 2.5.3.4 | No change | | |
| **2.5.4** | **Clearance of a permissive aspect at a main signal** | | | |
| 2.5.4.1 | 2.5.4.1 | No change | | |
| G 2.5.4.2 | G 2.5.4.2 | Revised | Permissive MA replace by on-sight MA | 2 |
| G 2.5.4.3 | G 2.5.4.3 | No change | | |
| G 2.5.4.4 | G 2.5.4.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.5.4.5 to G 2.5.4.8 | G 2.5.4.5 to G 2.5.4.8 | No change | | |
| **2.6.1** | Title changed to **PoSA aspects shown at stop signals** | | | |
| 2.6.1.1 | 2.6.1.1 | Revised | The term 'degraded MA' is replaced by the correct term 'PoSA MA' | 2 |
| 2.6.1.2 | | Deleted | The requirement to not show a route indication before a PoSA aspect is deleted because the capability to implement this is likely to be affected by the failure, which is the cause of the PoSA MA. The requirement also contradicts the guidance in G 2.6.1.8 | 2 |
| G 2.6.1.3 | G 2.6.1.2 | Revised | Rationale expanded to explain how the PoSA MA is intended to be used by drivers | 2 |
| G 2.6.1.4 | G 2.6.1.6 | Renumbered | Rationale for deleted requirement 2.6.1.2 moved to guidance | 2 |
| G 2.6.1.5 | G 2.6.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.6.1.6 | G 2.6.1.4 | Redrafted | Guidance on the application of a PoSA MA is simplified | 2 |
| G 2.6.1.7 | G 2.6.1.5 | Revised | Guidance amended to clarify that a PoSA aspect is shown using a flashing position light OFF aspect | 2 |
| G 2.6.1.8 | G 2.6.1.7 and G 2.6.1.8 | Redrafted and renumbered | Guidance simplified and split into two clauses | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.6.1.9 | G 2.6.1.9 | No change | | |
| G 2.6.1.10 | G 2.6.1.10 | Revised | Guidance revised to explain that risk assessment is used to determine whether it is acceptable to show a train dispatch indication with a PoSA aspect | 2 |
| G 2.6.1.11 | | Withdrawn | Guidance on configuring automatic train protection with a PoSA MA is deleted because it does not reflect the capability of existing ATP systems | 2 |
| **2.6.2** | **Preset shunt signal aspects with a PoSA MA** | | | |
| 2.6.2.1 | 2.6.2.1 | Revised | Requirement amended to include the permissive aspect. | 2 |
| G 2.6.2.2 | G 2.6.2.2 | No change | | |
| G 2.6.2.3 | G 2.6.2.3 | No change | | |
| G 2.6.2.4 | G 2.6.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.6.2.5 | G 2.6.2.5 | Revised | Additional guidance on the business benefit of showing a PoSA MA when a shunting signal is preset | |
| **2.7.1** | Title changed to **Showing a main proceed aspect at stop signals** | | | |
| 2.7.1.1 | 2.7.1.1 | Revised | 'Full MA' replaces the term 'non-permissive MA' | 2 |
| G 2.7.1.2 | G 2.7.1.2 | Revised | 'Full MA' replaces the term 'non-permissive MA' | 2 |
| G 2.7.1.3 | G 2.7.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.7.1.4 | G 2.7.1.4 | Revised | Guidance expanded to describe which stop signals are applicable | 2 |
| G 2.7.1.5 | G 2.7.1.5 | Revised | 'Full MA' replaces the term 'non-permissive MA' | 2 |
| | G 2.7.1.6 | New | Additional guidance on the application of the temporary approach control function | 2 |
| **2.7.2** | Title changed to **'Showing a cautionary aspect sequence'** | | | |
| 2.7.2.1 | 2.7.2.1 | Revised | 'Full MA' replaces the term 'non-permissive MA' | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.7.2.2 | G 2.7.2.2 | Revised | Rationale revised to clarify that the readable distance of a stop aspect is usually insufficient 'at the permissible speed' to provide time for the train driver to respond….. 'Full MA' replaces the term 'non-permissive MA' | 2 |
| G 2.7.2.3 | G 2.7.2.3 | No change | | |
| G 2.7.2.4 | G 2.7.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.7.2.5 | G 2.7.2.5 | No change | | |
| G 2.7.2.6 | G 2.7.2.6 | No change | | |
| G 2.7.2.7 | G 2.7.2.7 | No change | | |
| **2.7.3** | **Location of the first cautionary aspect** | | | |
| 2.7.3.1 | 2.7.3.1 | Revised | Revised to clarify that the first cautionary aspect shall be shown at least 'minimum signalling braking distance (MSBD)' from the main stop signal. This correlates with the requirements in GKRT0075 and the revised definition of MSBD | 2 |
| G 2.7.3.2 | G 2.7.3.2 | Revised | Rationale revised to clarify why the requirement relates to MSBD | 2 |
| G 2.7.3.3 | G 2.7.3.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.7.3.4 | G 2.7.3.4 | No change | | |
| G 2.7.3.5 | G 2.7.3.5 | No change | | |
| G 2.7.3.6 | G 2 7.3.6 | Revised | Term 'signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.7.3.7 | G 2.7.3.7 | No change | | |
| G 2.7.3.8 | G 2.7.3.8 | Revised | Term 'signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.7.3.9 | G 2.7.3.9 | Revised | Term 'signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| | G 2.7.3.10 | New | Guidance on assessing the risk of signal spacing that is less than MSBD + 10 % | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | G 2.7.3.11 | New | Guidance on assessing the driveability of signal spacing that is greater than MSBD + 50 % | 2 |
| **2.7.4** | **Consistency of cautionary aspect sequence** | | | |
| 2.7.4.1 | 2.7.4.1 | Redrafted | Requirement clarified – no material change | 2 |
| G 2.7.4.2 | G 2.7.4.2 | Revised | Additional rationale provided to explain why a cautionary aspect sequence is not tailored to the performance of a train. | 2 |
| G 2.7.4.3 | G 2.7.4.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.7.4.4 | G 2.7.4.4 | No change | | |
| G 2.7.4.5 | | Deleted | Reference to GKRT0036 deleted because it is not relevant to transitions between different methods of lineside signalling | 2 |
| | G 2.7.4.5 | New | Additional guidance to explain that a different cautionary aspect sequence can be shown on each signalled approach to a main stop signal. | 2 |
| **2.8.1** | **Types of cautionary aspect sequence** | | | |
| 2.8.1.1 | 2.8.1.1 | No change | | |
| 2.8.1.2 | 2.8.1.2 | No change | | |
| G 2.8.1.3 | G 2.8.1.3 | Redrafted | References to requirements added | 2 |
| G 2.8.1.4 | G 2.8.1.4 | No change | | |
| G 2.8.1.5 | G 2.8.1.5 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| | G 2.8.1.6 | New | Guidance on using colour light signals | 2 |
| G 2.8.1.6 | G 2.8.1.7 | Revised | Guidance revised to remove the inference that it is a permission. Additional guidance about provision of MSBD | 2 |
| G 2.8.1.7 to G 2.8.1.8 | G 2.8.1.8 to G 2.8.1.9 | Renumbered | No change | |
| G 2.8.1.9 | | Withdrawn | Details of existing non-conforming aspect sequences deleted | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.8.1.10 | G 2.8.1.10 | Revised | Guidance on the application of signal overrun risk assessment to confirm the acceptability of perpetuating a non-conforming aspect sequence. | 2 |
| G 2.8.1.11 to G 2.8.1.12 | G 2.8.1.10 to G 2.8.1.12 | No change | | |
| G 2.8.1.13 | G 2.8.1.13 | Revised | G 2.8.1.13 b) revised - Term 'signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.8.1.14 | G 2.8.1.14 | No change | | |
| G 2.8.1.15 | G 2.8.1.15 | Redrafted | Figure 1 renumbered to Figure 3 and corrected to show 'MSBD' | 2 |
| G 2.8.1.16 | G 2.8.1.16 | Redrafted | Figure 2 renumbered to Figure 4 and corrected to show 'MSBD'. Guidance added to clause b) | 2 |
| G 2.8.1.17 | G 2.8.1.17 | Redrafted | Figure 3 renumbered to Figure 5 and corrected to show 'MSBD'. Guidance added on the headway implications | 2 |
| G 2.8.1.18 | G 2.8.1.18 | No change | | |
| G 2.8.1.19 | G 2.8.1.19 | Revised | Guidance expanded to explain why an isolated 3-aspect sequence on a 4-aspect railway increases SPAD risk | 2 |
| G 2.8.1.20 | G 2.8.1.20 | No change | | |
| G 2.8.1.21 | G 2.8.1.21 | Revised | G 2.8.1.21 a) revised - Term 'signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.8.1.22 | G 2.8.1.22 | Revised | Figure 4 renumbered to Figure 6 and corrected to show 'MSBD'. Guidance simplified – the driver will not see a transition | 2 |
| G 2.8.1.24 | G 2.8.1.23 | Revised | Guidance expanded to explain how the MAF junction aspect sequence is applied at a 4-aspect to 3-aspect transition. Term 'signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 1 and 2 |
| G 2.8.1.25 | G 2.8.1.25 | Revised | Guidance rewritten in terms of a driveability assessment. | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| **2.8.2** | **3-aspect sequence** | | | |
| 2.8.2.1 | 2.8.2.1 | No change | | |
| G 2.8.2.2 | G 2.8.2.2 | No change | | |
| G 2.8.2.3 | G 2.8.2.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.8.2.4 | G 2.8.2.4 | Revised | Figure 5 renumbered to Figure 7 and corrected to show 'MSBD'. | 2 |
| G 2.8.2.5 | G 2.8.2.5 | Revised | Term 'signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.8.2.6 | G 2.8.2.6 | No change | | |
| G 2.8.2.7 | G 2.8.2.7 and G 2.8.2.8 | Revised | Guidance revised to correct the terminology relating to approach control from red aspect. 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| **2.8.4** | **4-aspect sequence** | | | |
| 2.8.3.1 | 2.8.3.1 | Redrafted | The requirement has been redrafted to make it easier to understand – no material change | 2 |
| G 2.8.3.2 | G 2.8.3.2 | Redrafted | The rationale is simplified | |
| G 2.8.3.3 | G 2.8.3.3 | Redrafted | The rationale is simplified | |
| G 2.8.3.4 | G 2.8.3.4 | Redrafted | The rationale is simplified | |
| G 2.8.3.5 | G 2.8.3.5 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.8.3.6 | G 2.8.3.6 | No change | | |
| G 2.8.3.7 | G 2.8.3.7 | Revised | Clause G 2.8.3.7 a) is revised. 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.8.3.8 | G 2.8.3.8 | Revised | Guidance revised to remove the inference that it is a permission. Figure 6 renumbered to Figure 8 and corrected to show 'MSBD' | 2 |
| G 2.8.3.9 | G 2.8.3.9 | Withdrawn | Guidance clause withdrawn as unnecessary | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.8.3.10 | G 2.8.3.9 | Revised | Guidance revised to correct the terminology relating to approach control from red aspect. 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)'. Reference to requirement 2.8.3.1.c)i) corrected. | 2 |
| G 2.8.3.11 | G 2.8.3.10 | Revised | Reference change from GERT8000 to 'The Rule Book' | 2 |
| G 2.8.3.12 | G 2.8.3.11 | Revised | 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.8.3.13 | G 2.8.3.12 | Revised | 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.8.3.14 | G 2.8.3.13 | Revised | Redrafted to remove the inference that the guidance is a permission. 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.8.3.15 | G 2.8.3.14 | Redrafted | Guidance simplified | 2 |
| G 2.8.3.16 | G 2.3.8.15 | No change | Reference to Figure 9 added. Figure 7 renumbered to Figure 9 and corrected to show 'MSBD'. | 2 |
| G 2.8.3.17 | G 2.3.8.16 | Renumbered | No change | |
| G 2.8.3.18 | G 2.8.3.17 | Redrafted | Guidance simplified | 2 |
| G 2.8.3.19 | G 2.8.3.18 | Renumbered | No change | |
| G 2.3.8.20 | G 2.3.8.19 | Revised | G 2.3.8.19 b) revised: 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.3.8.21 | G 2.3.8.20 | Revised | 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.3.8.22 to G 2.3.8.25 | G 2.3.8.21 to G 2.3.8.24 | No change | | |
| G 2.3.8.26 | G 2.3.8.25 | Redrafted | Guidance redrafted to provide a better explanation of a closing up signal and a cross reference to the requirement | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.3.8.27 | G 2.3.8.26 | Redrafted | Guidance simplified | 2 |
| G 2.8.3.28 | G 2.8.3.27 | Renumbered | No change | |
| G 2.3.8.29 | G 2.3.8.28 | Revised | G 2.3.8.28 a) revised: 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.8.3.30 | G 2.8.3.29 | Renumbered | No change | |
| **2.9.1** | **Application of a distant aspect sequence** | | | |
| 2.9.1.1 | 2.9.1.1 | No change | | |
| G 2.9.1.2 | G 2.9.1.2 | No change | | |
| G 2.9.1.3 | G 2.9.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.9.1.4 | G 2.9.1.4 | Revised | Guidance clarified that not all block systems include worked signals | 2 |
| G 2.9.1.5 | G 2.9.1.5 | No change | | |
| G 2.9.1.6 | G 2.9.1.6 | No change | | |
| G 2.9.1.7 | G 2.9.1.7 | Revised | Additional guidance on methods of showing a distant ON aspect | 2 |
| **2.9.2** | Title changed to **Showing a distant OFF aspect on non-TCB lines** | | | |
| 2.9.2.1 | 2.9.2.1 | Revised | Requirement simplified to remove reference to non-TCB areas | 2 |
| G 2.9.2.2 to G 2.9.2.3 | G 2.9.2.2 to G 2.9.2.3 | No change | | |
| G 2.9.2.4 | G 2.9.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.9.2.5 | G 2.9.2.5 | No change | | |
| **2.9.3** | **Provision of additional semaphore distant arms** | | | |
| 2.9.3.1 | 2.9.2.1 | No change | | |
| G 2.9.3.2 to G 2.9.3.3 | G 2.9.3.2 to G 2.9.3.3 | No change | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 2.9.3.4 | G 2.9.3.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.9.3.5 | G 2.9.3.5 | No change | | |
| **2.9.4** | **Controlled release of preceding home signal aspects** | | | |
| 2.9.4.1 | 2.9.4.1 | Revised | Wording simplified – 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.9.4.2 | G 2.9.4.2 | Revised | 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.9.4.3 | G 2.9.4.3 | Revised | 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.9.4.4 | G 2.9.4.4 | No change | | |
| G 2.9.4.5 | G 2.9.4.5 | Revised | 'Signalling braking distance (SBD)' replaced by the term 'minimum signalling braking distance (MSBD)' | 2 |
| G 2.9.4.6 | G 2.9.4.6 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 2.9.4.7 | G 2.9.4.7 | Revised | Guidance amended to refer to the home signal | 2 |
| G 2.9.4.8 | G 2.9.4.8 | No change | | |
| | G 2.9.4.9 | New | Additional guidance on application of driveability assessment to review inconsistent signal spacing | 2 |
| **3.1.1** | **Provision of routing information** | | | |
| 3.1.1.1 | 3.1.1.1 | Redrafted | Requirement rewritten to use consistent terminology – no material change | 2 |
| G 3.1.1.2 | G 3.1.1.2 | Redrafted | Rationale redrafted to better explain why requirement 3.1.1.1 a) is needed | 2 |
| G 3.1.1.3 | G 3.1.1.3 | Redrafted | Rationale redrafted to better explain why requirement 3.1.1.1 b) is needed | 2 |
| G 3.1.1.4 | G 3.1.1.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.1.1.5 | G 3.1.1.5 | Redrafted | Guidance rewritten to use consistent terminology – no material change | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 3.1.1.6 | G 3.1.1.6 | Revised | Guidance on using signal sighting assessment and a driveability assessment to confirm that the information provided by the lineside signalling system is sufficient to inform the train driving task at facing points. | |
| G 3.1.1.7 | G 3.1.1.7 | Redrafted | Guidance redrafted to better describe how drivers interpret which route is set at a junction | 2 |
| G 3.1.1.8 to | G 3.1.1.8 | Redrafted | Minor editorial change for consistency of terminology | 2 |
| G 3.1.1.9 | G 3.1.1.9 | Redrafted | Minor editorial change for consistency of terminology | 2 |
| G 3.1.1.10 | G 3.1.1.10 and G 3.1.1.11 | Revised | G 3.1.1.10 sets out good practice for indicating a diverging signal route using a junction indicator<br>G 3.1.1.11 sets out typical scenarios where provision of an alphanumeric route indicator is good practice | 1 |
| G 3.1.1.12 | G 3.1.1.12 | New | Additional guidance to incorporate content from NR/L2/SIG/19609 | 1 |
| G 3.1.1.13 | G 3.1.1.13 | New | Additional guidance to incorporate content from NR/L2/SIG/19609 | 1 |
| G 3.1.1.14 | G 3.1.1.14 | New | Additional guidance to incorporate content from NR/L2/SIG/19609 | 1 |
| G 3.1.1.15 | G 3.1.1.15 | New | Additional guidance to incorporate content from NR/L2/SIG/19609 | 1 |
| G 3.1.1.16 | G 3.1.1.16 | New | Additional guidance to incorporate content from NR/L2/SIG/19609 | 1 |
| **3.1.2** | **Alphanumeric route indications** | | | |
| 3.1.2.1 | G 3.1.2.5 | Moved to guidance | The requirement is replaced by guidance on good practice in the application of alphanumeric route indications to meet requirement 3.1.1.1 | 1 |
| G 3.1.2.2 | G 3.1.2.5 | Revised | The guidance is updated to set out good practice in the application of alphanumeric route indications. | 1 |
| | G 3.1.2.2 to G 3.1.2.4 | New | A cross reference is added to the requirements for the appearance and meaning of alphanumeric route indications set out in RIS-0758-CCS and the requirements for assessing the interpretability and driveability of route indications in RIS-0737-CCS and RIS-0713-CCS. | 1 |
| G 3.1.2.3 | G 3.1.2.4 | Revised | A cross reference is added to the requirements for assessing the interpretability and driveability of route indications in RIS-0737-CCS and RIS-0713-CCS | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 3.1.2.4 | G 3.1.2.1 | Revised | The guidance is rewritten to introduce the application of alphanumeric route indications | 1 |
| G 3.1.2.5 | G 3.1.2.5a) | Redrafted | Redrafted to remove the inference that the guidance is a permission | 2 |
| G 3.1.2.6 | G 3.1.2.6 | Revised | Additional text to clarify what is meant by a 'similar' alphanumeric indication and provide and example of using the similar indications 'S' and 'SDG' to indicate an MA towards a siding. | 2 |
| **3.1.3** | **Position of initial route information** | | | |
| 3.1.3.1 | 3.1.3.1 | Redrafted | Requirement redrafted to provide better clarity – no material change | 2 |
| G 3.1.3.2 | G 3.1.3.2 | Redrafted | Rationale redrafted to use consistent terminology for 'signal route' and 'line' | 2 |
| G 3.1.3.3 | G 3.1.3.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.1.3.4 | G 3.1.3.5 | Revised | Guidance expanded to cover the use of attainable speed in determining the distance from the first indication of route to the junction | 1 |
| G 3.1.3.5 | G 3.1.3.4 | Revised | Guidance simplified | 2 |
| | G 3.1.3.6 | New | Additional guidance to incorporate content from NR/L2/SIG/19609 | 1 |
| G 3.1.3.6 | G 3.1.3.7 and G 3.1.3.8 | Redrafted | Split into two clauses:<br>G 3.1.3.7 provides guidance on showing the first indication of route at least MSBD from the junction in 3-aspect signalling areas, including links to further guidance on use of junction aspect sequences MAY-FA3 and MAF-SD<br>G 3.1.3.8 provides guidance on showing the first indication of route at least MSBD from the junction in 4-aspect signalling areas, including a link to further guidance on use of junction aspect sequences MAY-FA4 | 1 |
| G 3.1.3.7 | G 3.1.3.9 | Redrafted | Redrafted to provide better clarity and links to further guidance on junction aspect sequences MAF and MAY-YY | 1 |
| G 3.1.3.8 | G 3.1.3.10 | Redrafted | Redrafted to remove the inference that the guidance is a permission | 2 |
| G 3.1.3.9 | G 3.1.3.11 | Redrafted | Redrafted to provide better clarity – no material change | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| **3.1.4** | **Maximum number of routes applicable to one route indication** | | | |
| 3.1.4.1 | 3.1.4.1 | Redrafted | Requirement rewritten to provide better clarity, no material change | 2 |
| G 3.1.4.2 | G 3.1.4.2 | Redrafted | Rationale simplified | 2 |
| G 3.1.4.3 | G 3.1.4.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.1.4.4 | G 3.1.4.4 | Revised | Additional guidance on four examples of diverging junctions | 1 |
| G 3.1.4.5 | G 3.1.4.5 | Redrafted | Guidance simplified | 2 |
| G 3.1.4.6 | G 3.1.4.6 | No change | | |
| **3.1.5** | **Consistency of route indications** | | | |
| 3.1.5.1 | 3.1.5.1 | Redrafted | Requirement rewritten to provide better clarity, no material change | 2 |
| G 3.1.5.2 | G 3.1.5.2 | Redrafted | Rationale simplified – no material change | 2 |
| G 3.1.5.3 | G 3.1.5.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.1.5.4 | G 3.1.5.4 | No change | | |
| **3.2.1** | Title changed to **Routing information for an MA towards a limit of shunt** | | | |
| 3.2.1.1 | 3.2.1.1 | No change | | |
| G 3.2.1.2 | G 3.2.1.2 | Redrafted | Rationale simplified – no material change | 2 |
| G 3.2.1.3 | G 3.2.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.2.1.4 | G 3.2.1.4 | No change | | |
| G 3.2.1.5 | G 3.2.1.5 | No change | | |
| G 3.2.1.6 | G 3.2.1.6 | Redrafted | Redrafted to remove the inference that the guidance is a permission | 2 |
| **3.2.2** | Title changed to **Routing information with a shunt MA** | | | |
| 3.2.2.1 | 3.2.2.1 | Revised | Clause c) deleted because requirements for showing a route indication with a PoSA aspect is covered in 2.6 | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | 3.2.2.2 | New | A new requirement to show a route indication where the driver needs to interpret a permissive MA from a shunt MA | 1 |
| G 3.2.2.2 | G 3.2.2.3 | Revised | Rationale expanded to cover requirement 3.2.2.2 | 1 |
| G 3.2.2.3 | G 3.2.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.2.2.4 | | Withdrawn | Duplicates requirement 3.2.2.1b) | 2 |
| G 3.2.2.5 | G 3.2.2.5 | No change | | |
| G 3.2.2.6 | | Withdrawn | Guidance on showing a route indication with a PoSA aspect is provided in 2.6 | 2 |
| G 3.2.2.7 | G 3.2.2.6 | Renumbered | | |
| | G 3.2.2.7 | New | Additional guidance to incorporate content from NR/L2/SIG/19609 | 1 |
| **3.3** | **Requirement for indication of route with a permissive MA** | | | |
| 3.3.1 | 3.3.1 | No change | | |
| G 3.3.2 | G 3.3.2 | No change | | |
| G 3.3.3 | G 3.3.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.3.4 | G 3.3.4 | Revised | Cross reference updated | |
| **3.4.1** | **Junction signal position** | | | |
| | G 3.4.1.1 | New | Guidance on the train driving task at a diverging junction | 1 |
| G 3.4.1.1 | G 3.4.1.2 | Redrafted | Guidance amended to provide better clarity on the risk arising from driver distraction | 1 |
| G 3.4.1.2 | G 3.4.1.3 | No change | | |
| G 3.4.1.3 | G 3.4.1.4 | Redrafted | Minor change to wording – no material change | 2 |
| G 3.4.1.4 | G 3.4.1.5 | Renumbered | No change | |
| **3.4.2** | Title changed to **Indication of signalled route at a main junction signal** | | | |
| 3.4.2.1 | 3.4.2.1 | Redrafted | Requirement redrafted to provide consistent terminology – no material change | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 3.4.2.2 | G 3.4.2.2 | Redrafted | Rationale redrafted to provide consistent terminology | 2 |
| G 3.4.2.3 | G 3.4.2.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.4.2.4 | G 3.4.2.5 | Redrafted | Guidance redrafted to provide consistent terminology | 2 |
| G 3.4.2.5 | G 3.4.2.4 | Redrafted | Guidance redrafted to remove the implication of a permission | 2 |
| G 3.4.2.6 | G 3.4.2.6 | No change | | |
| | G 3.4.2.7 | New | Additional guidance to incorporate content from NR/L2/SIG/19609 | 1 |
| G 3.4.2.7 | G 3.4.2.8 | No change | | |
| **3.4.3** | **When the route indication is presented** | | | |
| 3.4.3.1 | 3.4.3.1 | Redrafted | Requirement redrafted to provide consistent terminology | 2 |
| G 3.4.3.2 | G 3.4.3.2 | Redrafted | Rationale redrafted to provide consistent terminology | 2 |
| G 3.4.3.3 | G 3.4.3.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| | G 3.4.3.4 | New | Additional cross reference to section 2.1.3 to incorporate content from NR/L2/SIG/19609 | 1 |
| G 3.4.3.4 | G 3.4.3.5 | Renumbered | No change | |
| **3.4.4** | Title changed to **Interpretability of routing information at a main junction signal** | | | |
| 3.4.4.1 | 3.4.4.1 | Revised | The 10 mph exception is removed because the requirement is good practice at all diverging junctions | 1 |
| G 3.4.4.2 | G 3.4.4.2 | No change | | |
| G 3.4.4.3 | | Withdrawn | Rationale explaining the 10 mph exception in the requirement is withdrawn | 1 |
| G 3.4.4.4 | G 3.4.4.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.4.4.5 | G 3.4.4.4 | Revised | Guidance expanded to include use of a banner junction indication and better clarity on which junction aspect sequences are relevant to meeting the requirement | 1 |
| G 3.4.4.6 | G 3.4.4.5 | Redrafted | Requirement redrafted to use the term ‘main proceed aspect’ instead of ‘non-permissive MA’ | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 3.4.4.7 | G 3.4.4.6 | Renumbered | No change | |
| G 3.4.4.8 | G 3.4.4.7 | Redrafted | Guidance expressed as good practice | 2 |
| G 3.4.4.9 | G 3.4.4.8 | Redrafted | Guidance redrafted to provide better clarity | 2 |
| **3.4.5** | Title changed to **Showing the same indication of route for alternative paths** | | | |
| 3.4.5.1 | 3.4.5.1 | Revised | Requirement amended to clarify that a), b) and c) all apply | 2 |
| G 3.4.5.2 | G 3.4.5.2 | Redrafted | Guidance redrafted to provide better clarity | 2 |
| G 3.4.5.3 | G 3.4.5.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.4.5.4 | G 3.4.5.4 | Revised | Guidance revised to clarify that a similar permissible speed profile presumes a permissible speed limit differential of 10 mph or less | 1 |
| G 3.4.5.5 | G 3.4.5.5 | Redrafted | Guidance redrafted to provide better clarity | 2 |
| | G 3.4.5.6 | New | Guidance including new Figures 10 and 11 | 1 |
| G 3.4.5.7 | G 3.4.5.6 | Revised | Guidance explaining the examples in Figures 10 and 11 | 1 |
| **3.4.6** | Title changed to **Banner repeater indications at a diverging junction** | | | |
| 3.4.6.1 | 3.4.6.3 | Redrafted | Minor edit only | 2 |
| | 3.4.6.1 | New | Additional requirement to incorporate content from NR/L2/SIG/19609 on when a non-splitting banner repeater indication may be provided | 1 |
| | 3.4.6.2 | New | Additional requirement to incorporate content from NR/L2/SIG/19609 on showing a non-splitting banner repeater indication with a junction signal aspect | 1 |
| G 3.4.6.2 | G 3.4.6.4 and G 3.4.6.5 | Revised and renumbered | Rationale expanded to explain why new requirements 3.4.6.1 and 3.4.6.2 are necessary | 1 |
| G 3.4.6.3 | G 3.4.6.6 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.4.6.4 | G 3.4.6.8 and | Revised | Guidance expanded and redrafted in two separate clauses: | 1 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | G 3.4.6.10 | | G 3.4.6.8 describes the four types of banner repeater indicator, any of which can be provided with a junction signal<br>G 3.4.6.10 describes the benefit of providing a splitting banner repeater with a junction signal that has two routes. Reference to the appearance and meanings of banner repeater indications in RIS-0758-CCS added | |
| G 3.4.6.5 | G 3.4.6.12 | Revised | Guidance amended to remove the inference of permission and explain the role of driveability assessment in determining the fitness for purpose of banner repeater indications | 1 |
| G 3.4.6.6 | G 3.4.6.8, G 3.4.6.9 and G 3.4.6.12 | Revised | Guidance amended to explain the role of driveability assessment in determining the fitness for purpose of banner repeater indications Additional guidance to incorporate content from NR/L2/SIG/19609 on showing a non-splitting banner repeater indication with a junction signal aspect | |
| G 3.4.6.7 | | Deleted | Banner junction indicators are covered in a new section 3.7 | |
| G 3.4.6.8 | G 3.4.6.7 | Redrafted | Guidance redrafted to provide better clarity | 1 |
| | **3.4.7** | **New** | **Banner junction indications** | 1 |
| | 3.4.7.1 | New | A new requirement setting out the indications shown by a banner junction indicator | 1 |
| | G 3.4.7.2 to G 3.4.7.4 | New | Rationale describing why the requirement for the indications shown by a banner junction indicator is necessary and why it is a good requirement | 1 |
| | G 3.4.7.5 to G 3.4.7.9 | New | New guidance on the application of banner junction indicators | 1 |
| **3.5.1** | Title changed to **Application of preliminary route indicators** | | | |
| 3.5.1.1 | 3.5.1.1<br>3.5.1.2<br>3.5.1.3 and<br>3.5.1.4 | Revised | The location of the PRI is specified to be at least 4 s at the permissible speed beyond the previous signal and so that the arrow indication is readable from the previous signal (3.5.1.4)<br>Clause a) is replaced by 3.5.1.1<br>Clause b) is replaced by 3.5.1.2 | 1 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | | | Clause c) is replaced by 3.5.1.3 | |
| 3.5.1.2 | 3.5.1.5 | Redrafted | Minor editorial change | 1 |
| | G 3.5.1.6 | New | Rationale revised to explain the position of the PRI after the previous signal | 1 |
| G 3.5.1.3 | G 3.5.1.7 | Revised | The rationale is revised to reflect the revised requirements for the location of the PRI | 1 |
| G 3.5.1.4 | G 3.5.1.8 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.5.1.5 | G 3.5.1.9 | Revised | The guidance on provision of a PRI is expanded to reflect that a PRI is one method of providing advance routing information to drivers, and is informed by risk assessment and driveability assessment. | 1 |
| G 3.5.1.6 | G 3.5.1.9 | Revised | Guidance expanded to explain the benefit of providing a PRI | 1 |
| G 3.5.1.7 | | Withdrawn | Guidance was not relevant to the amended requirement | 1 |
| G 3.5.1.8 | | Withdrawn | Guidance was not relevant to the amended requirement | 1 |
| G 3.5.1.9 | G 3.5.1.11 | Revised | Guidance amended to inform a decision to provide an outer-PRI in a 4-aspect signalling area. | 1 |
| | G 3.5.1.10 | New | Guidance on how the PRI informs the train driving task | 1 |
| | G 3.5.1.12 | New | Guidance on where a PRI might be beneficial | 1 |
| | G 3.5.1.13 | New | Guidance showing an example of a PRI in new Figure 12 | |
| **G 3.5.2** | Title changed from 'Presentation of arrow indications' to '**Showing PRI indications'** | | | |
| 3.5.2.1 | 3.5.2.1 | Revised | The requirement for showing an arrow indication is revised to align with good practice in maintaining a consistent aspect sequence on the approach to the diverging junction and to remove unnecessary constraints relating to lamp proving, which is covered in section 2.1.3 | 1 |
| 3.5.2.2 | 3.5.2.2 | Revised | The requirement for showing an arrow indication is revised to align with good practice in maintaining a consistent aspect sequence on the approach to the diverging junction and to remove unnecessary constraints relating to lamp proving, which is covered in section 2.1.3 | 1 |
| G 3.5.2.3 | G 3.5.2.3 | No change | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 3.5.2.4 | | Withdrawn | The rationale is withdrawn because the requirement has changed | 1 |
| | G 3.5.2.4 | New | New rationale explaining requirement 3.5.2.2 | 1 |
| G 3.5.2.5 | G 3.5.2.5 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.5.2.6 | G 3.5.2.6 | Revised | Further guidance explaining the meaning of the PRI arrow indications | 1 |
| | G 3.5.2.7 | New | Cross reference to guidance on lamp proving in section 2.1.3 | 1 |
| | G 3.5.2.8 | New | Guidance on extinguishing the PRI | 1 |
| **3.5.3** | **Aspect sequence where a PRI is provided** | | | |
| 3.5.3.1 | | Withdrawn | The requirements for lamp proving are withdrawn and replaced by guidance in section 2.1.3 | 2 |
| G 3.5.3.2 | | Withdrawn | The requirements for lamp proving are withdrawn and replaced by guidance in section 2.1.3 | 2 |
| G 3.5.3.3 | | Withdrawn | The requirements for lamp proving are withdrawn and replaced by guidance in section 2.1.3 | 2 |
| G 3.5.3.4 | | Withdrawn | The requirements for lamp proving are withdrawn and replaced by guidance in section 2.1.3 | 2 |
| G 3.5.3.5 | | Withdrawn | The requirements for lamp proving are withdrawn and replaced by guidance in section 2.1.3 | 2 |
| **3.6.1** | **Types of junction aspect sequences** | | | |
| 3.6.1.1 | 3.6.1.1 | Redrafted | Junction aspect sequence descriptions in Table 1 amended to reflect good practice | 1 |
| G 3.6.1.2 | G 3.6.1.2 | No change | | |
| G 3.6.1.3 | G 3.6.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| | G 3.6.1.4 | New | Additional guidance explaining good practice in the application of a junction aspect sequence | 1 |
| G 3.6.1.4 | G 3.6.1.5 | Renumbered | No change | |
| G 3.6.1.5 | G 3.6.1.6 | Redrafted | Clause G 3.6.1.6 b) redrafted to clarify the benefit of providing a junction aspect sequence | 1 |
| G 3.6.1.6 to G 3.6.1.7 | G 3.6.1.7 to G 3.6.1.8 | Renumbered | No change | |
| G 3.6.1.8 | G 3.6.1.9 | Redrafted | Redrafted to clarify that MAR applies an approach release from red control and that the junction signal shows the less restrictive proceed aspect after the train has passed the previous signal and | 1 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | | | when the driver is assumed to have visibility of the junction signal proceed aspect and indication of signal route | |
| G 3.6.1.9 | G 3.6.1.10 | Renumbered | | |
| G 3.6.1.10 | G 3.6.1.11 | Revised | Guidance revised to explain that a temporary approach control function can be applied to selective routes beyond a junction signal | 1 |
| | G 3.6.1.12 to G 3.6.1.13 | New | Additional guidance on signalling alternative approaches to a junction signal to incorporate content from NR/L2/SIG/19609 | 1 |
| | G 3.6.1.14 to G 3.6.1.16 | New | Additional guidance on control of 'reading-through' risk at a junction signal to incorporate content from NR/L2/SIG/19609 | 1 |
| **3.6.2** | Title amended to **Showing different junction aspect sequences at the same location** | | | |
| 3.6.2.1 | 3.6.2.1 | Revised | Note added to explain that Table 3 is intended to be read from left to right. Definitions added to explain the acronyms. Table 3 simplified with no material change | 1 |
| G 3.6.2.2 | G 3.6.2.2 | No change | | |
| G 3.6.2.3 | G 3.6.2.3 | No change | | |
| G 3.6.2.4 | G 3.6.2.4 | Redrafted | Guidance amended to use consistent terminology | 2 |
| G 3.6.2.5 | G 3.6.2.5 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.6.2.6 | G 3.6.2.6 | No change | Guidance simplified | 2 |
| G 3.6.2.7 | G 3.6.2.7 | Redrafted | Redrafted to include the description of the MAR junction aspect sequence | 1 |
| G 3.6.2.8 | G 3.6.2.8 | No change | | |
| **3.6.3** | Title amended to **Showing the same junction aspect sequence for more than one diverging line** | | | |
| 3.6.3.1 | 3.6.3.1 | Revised | Requirement redrafted to improve clarity.<br>New requirement clause b) to incorporate content from NR/L2/SIG/19609 specifying that the diverging signal route with the higher permissible speed limit closer to the junction signal than other diverging signal routes that share the same junction aspect sequence. | 1 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | | | Clause b) renumbered to clause c)<br>Clause c) renumbered to clause d) and redrafted to improve clarity. | |
| G 3.6.3.2 | G 3.6.3.2 | Redrafted | Rationale redrafted to improve clarity | 1 |
| G 3.6.3.3 | G 3.6.3.3 | Redrafted | Rationale redrafted to improve clarity | 1 |
| | G 3.6.3.4 | New | Additional rationale to explain requirement 3.6.1.1 b) | 1 |
| G 3.6.3.4 | G 3.6.3.5 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.6.3.5 | G 3.6.3.6 | Renumbered | | |
| **3.7.1** | **Delaying the junction signal proceed aspect** | | | |
| 3.7.1.1 | 3.7.1.1 | Revised | Requirement revised to incorporate content from NR/L2/SIG/19609 to specify that when the MAR sequence (junction signal approach controlled from red ) is used, the junction signal shall show the main stop aspect until the train reaches the location where the junction signal proceed aspect and junction indication and can be read together. | 1 |
| G 3.7.1.2 | G 3.7.1.2 | Revised | Rationale revised to explain the change to requirement 3.7.1.1 | 1 |
| G 3.7.1.3 | G 3.7.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.7.1.4 | G 3.7.1.4 | Revised | Guidance simplified to remove references to aspect sequences | 2 |
| G 3.7.1.5 | G 3.7.1.5 | No change | | |
| G 3.7.1.6 | G 3.7.1.6 | No change | | |
| G 3.7.1.7 | G 3.7.1.7 | Revised | Guidance simplified to remove design details | 2 |
| **3.7.2** | **Delaying the junction signal proceed aspect where signal sighting is restricted** | | | |
| 3.7.2.1 | 3.7.2.1 | Redrafted | MAR acronym written out in full | 2 |
| | 3.7.2.2 | New | Additional requirement for maintaining the consistency of the banner repeater indication and a junction signal aspect | 1 |
| G 3.7.2.2 | G 3.7.2.3 | Revised | Guidance expanded to refer to the applicability of permissible speed information | 1 |
| G 3.7.2.3 | | Withdrawn | Rationale withdrawn to reflect the change in requirement 3.7.2.1 | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 3.7.2.4 | G 3.7.2.5 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.7.2.5 | G 3.7.2.6 | Revised | Guidance clause b) deleted – a PRI is not used to overcome restrictive signal sighting | 1 |
| G 3.7.2.6 | G 3.7.2.7 | No change | | |
| G 3.7.2.7 | G 3.7.2.4 | Revised | The guidance is the rationale for requirement 3.7.2.2 | 1 |
| G 3.7.2.8 | G 3.7.2.8 | No change | | |
| **3.8** | **Junction aspect sequence: MAF** | | | |
| G 3.8.1 | G 3.8.1 | Redrafted | The definition of MAF is written out in full | 1 |
| G 3.8.2 | G 3.8.2 | Redrafted | Guidance amended to use consistent terminology | 2 |
| G 3.8.3 | G 3.8.3 | No change | | |
| | G 3.8.4 | New | Additional guidance on using a banner repeater of banner junction indicator to extend the readable distance of a junction signal aspect and route indication | 1 |
| G 3.8.4 | G 3.8.5 | No change | | |
| G 3.8.5 | G 3.8.6 | Revised | Guidance expanded to explain how a PRI can use used to assist in the control of mis-routing risk | 1 |
| G 3.8.6 | G 3.8.7 | No change | | |
| **3.9.1** | Title changed to **Application of flashing aspect sequences (MAY-FA.3 & MAY-FA.4)** | | | |
| 3.9.1.1 | 3.9.1.1 | Revised | Option b) is removed because it is not good practice and could increase reading-through risk | 1 |
| G 3.9.1.2 | G 3.9.1.2 | No change | Guidance on option b) removed | 1 |
| G 3.9.1.3 | G 3.9.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.9.1.4 | G 3.9.1.4 | No change | | |
| G 3.9.1.5 | G 3.9.1.5 | Revised | Guidance revised to explain that driver can obtain the actual extent of MA and the direction of the divergence only when the train is within the RRD of the junction signal aspect and signal route indication | 1 |
| G 3.9.1.6 | G 3.9.1.6 | Redrafted | Guidance redrafted to clarify that because flashing aspect sequences are generally applied to diverging signal routes with high permissible speed limits, the likelihood of a train exceeding the | 1 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | | | permissible speed limit would increase if the junction turnout speed is less than train drivers expect. Table 3 renumbered to Table 4 | |
| G 3.9.1.7 | G 3.9.1.7 | Revised | Guidance revised to explain how risk assessment informs a decision to show a flashing aspect sequence for a junction with a lower permissible speed limit at the point of divergence than shown in Table 4. Two examples are included | 1 |
| G 3.9.1.8 | G 3.9.1.9 | Revised | Guidance on using signal overrun risk assessment to confirm that the SPAD risk arising from use of a flashing aspect sequence is acceptable at the first signal beyond the junction | 1 |
| G 3.9.1.9 | G 3.9.1.8 | Revised | Guidance on destinations where a flashing aspect would increase collision risk | 1 |
| G 3.9.1.10 | G 3.9.1.10 | Revised | Guidance on SPAD risk mitigation at the first signal beyond the junction | 1 |
| G 3.9.1.11 | G 3.9.1.10 | Redrafted | Guidance combined with G 3.9.1.10 | 1 |
| G 3.9.1.12 | | Withdrawn | Guidance on 3.9.1.1 option a) withdrawn | 1 |
| G 3.9.1.13 | | Withdrawn | Guidance on 3.9.1.1 option b) withdrawn | 1 |
| G 3.9.1.14 | | Withdrawn | Guidance on 3.9.1.1 option b) withdrawn | 1 |
| **3.9.2** | Title changed to **MAY-FA3 aspect sequence controls** | | | |
| 3.9.2.1 | 3.9.2.1 | Revised | Requirement 3.9.2.1 b) revised to state that the junction signal shows the approach controlled yellow aspect until the train reaches the location where the junction signal proceed aspect and junction indication and can be read together | 1 |
| G 3.9.2.2 | G 3.9.2.2 | Revised | The rationale is revised to explain the change to requirement 3.9.2.1 b) | 1 |
| G 3.9.2.3 | G 3.9.2.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| | G 3.9.2.4 | New | Additional guidance to explain the function of the FY aspect | 1 |
| G 3.9.2.4 | G 3.9.2.5 | Renumbered and revised | Figure 9 renumbered as Figure 13 and amended to show MSBD | |
| **3.9.3** | Title changed to **MAY-FA4 aspect sequence controls** | | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| 3.9.3.1 | 3.9.3.1 | Revised | Requirement 3.9.3.1 c) revised to state that the junction signal shows the approach controlled yellow aspect until the train reaches the location where the junction signal proceed aspect and junction indication and can be read together | 1 |
| G 3.9.3.2 | G 3.9.3.2 | Revised | The rationale is revised to explain the change to requirement 3.9.3.1 c) | 1 |
| G 3.9.3.3 | G 3.9.3.3 | No change | | |
| G 3.9.3.4 | G 3.9.3.4 | Revised | The rationale for 3.9.3.9 c) is clarified to explain that the junction signal proceed aspect steps up from Y to a less restrictive aspect when the train driver has enough information to inform the train driving task at the junction | 1 |
| G 3.9.3.5 | G 3.9.3.5 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| | G 3.9.3.6 | New | Additional guidance to explain the function of the FY aspect | 1 |
| G 3.9.3.6 | G 3.9.3.7 | Redrafted | Guidance amended to use consistent terminology | 2 |
| G 3.9.3.7 | G 3.9.3.8 | Revised | Guidance revised to include a reference to Figure 14 (renumbered from Figure 10) and describe an example of omitting the FYY aspect. Figure 14 amended to show MSBD | 2 |
| G 3.9.3.8 | G 3.9.3.9 | Renumbered | No change | |
| G 3.9.3.9 | G 3.9.3.10 | Renumbered | No change | |
| **3.9.4** | Title changed to **Co-acting signals that show flashing aspects** | | | |
| 3.9.4.1 | 3.9.4.1 | Redrafted | The term ‘displayed’ is replaced by ‘shown’ | 2 |
| G 3.9.4.2 | G 3.9.4.2 | No change | | |
| G 3.9.4.3 | G 3.9.4.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.9.4.4 | G 3.9.4.4 | Withdrawn | The guidance on using a common object controller is deleted. | 1 |
| G 3.9.4.5 | G 3.9.4.5 | Renumbered | No change | |
| G 3.9.4.6 | G 3.9.4.6 | Renumbered | No change | |
| **3.10.1** | **Application of MAY-YY** | | | |
| 3.10.1.1 | 3.10.1.1 | Revised | 3.10.1.1 a) revised to clarify that the routing information is shown as a junction indication. | 1 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | | | 3.10.1.1 c) redrafted to replace the term 'route' with 'line' | |
| G 3.10.1.2 | G 3.10.1.2 | redrafted | Rationale redrafted to replace the term 'route' with 'line' | 2 |
| G 3.10.1.3 | G 3.10.1.3 | Revised | Rationale revised to explain that the position of stop signals relative to the junction provides enough time (and distance) for the train driver to control the speed of the train to conform with the permissible speed limit at the junction | 1 |
| G 3.10.1.4 | G 3.10.1.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.10.1.5 | G 3.10.1.5 | Redrafted | The guidance is redrafted to better explain why MAY-YY is used | 1 |
| G 3.10.1.6 to G 3.10.1.7 | G 3.10.1.6 to G 3.10.1.7 | No change | | |
| G 3.10.1.8 | G 3.10.1.8 | Revised | G 3.10.1.8 c) is revised to clarify that it is good practice to apply MAY-YY only where the maximum differential between all permissible speed limits on any line beyond the junction is 30 mph or less | 1 |
| | G 3.10.1.9 | New | Guidance that a preliminary route indicator (PRI), banner junction indicator (BJI) or splitting banner repeater indicator can be used to provide an earlier indication of the line on which the MA applies | 1 |
| G 3.10.1.9 | G 3.10.1.10 | Redrafted | Guidance simplified to improve clarity | |
| **3.10.2** | **Delaying the less restrictive proceed aspect** | | | |
| 3.10.2.1 | 3.10.2.1 | Revised | Requirement 3.10.2.1 b) revised to state that the junction signal shows the approach controlled yellow aspect until the train reaches the location where the junction signal proceed aspect and junction indication and can be read together | 1 |
| G 3.10.2.2 | G 3.10.2.2 | Revised | Guidance on when the less restrictive aspect can be shown | 1 |
| G 3.10.2.3 | G 3.10.2.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| | G 3.10.2.4 | New | Additional guidance on how the driver uses the FAY-YY aspect sequence | 1 |
| G 3.10.2.4 | G 3.10.2.5 | Revised | Additional guidance on dimension D1 in Figure 15 (renumbered from Figure 11) | 1 |
| G 3.10.2.5 | G 3.10.2.6 | Renumbered | No change | |
| **3.11.1** | **Application of MAF-SD** | | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| 3.11.1.1 | 3.11.1.1 | Revised | Option b) is removed because it is not good practice and could increase reading-through risk | 1 |
| G 3.11.1.2 | G 3.11.1.2 | Revised | Guidance revised to reflect the change to requirement 3.11.1.1 | 1 |
| G 3.1.11.3 | G 3.1.11.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.1.11.4 | G 3.1.11.4 | Redrafted | Guidance amended to use consistent terminology | 2 |
| G 3.1.11.5 | G 3.1.11.5 | Redrafted | Guidance amended to use consistent terminology | 2 |
| G 3.11.1.6 | G 3.11.1.6 | Revised | Revised to clarify that the splitting distant aspect is shown at least minimum signalling braking distance (MSBD) from the junction signal | 1 |
| G 3.11.1.7 | G 3.11.1.7 | No change | Cross references to other RISs that include requirements relevant to application of a splitting distant aspect sequence | 1 |
| | G 3.11.1.8 | New | Guidance on when it may be necessary to show the MAR aspect sequence | 1 |
| G 3.11.1.8 to G 3.11.1.10 | | Withdrawn | Replaced by the guidance on failure risk mitigation in section 2.1.3 | 1 |
| **3.11.2** | **MAF-SD aspect sequence controls in 3-aspect signalling areas** | | | |
| 3.11.2.1 | 3.11.2.1 | Redrafted | Clause b) redrafted to use consistent terminology | 1 |
| G 3.11.2.2 | G 3.11.2.2 | Redrafted | Guidance explaining how a driver uses the splitting distant aspect sequence | 1 |
| G 3.11.2.3 | G 3.11.2.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.11.2.4 | G 3.11.2.4 | Redrafted | Figures 12, 13 and 14 renumbered as 16, 17 and 18 | 1 |
| **3.11.3** | **MAF-SD aspect sequence controls in 4-aspect signalling areas** | | | |
| 3.11.3.1 | 3.11.3.1 | No change | | |
| G 3.11.3.2 | G 3.11.3.2 | No change | | |
| G 3.11.3.3 | G 3.11.3.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 3.11.3.4 | G 3.11.3.4 | No change | | |
| G 3.11.3.5 | G 3.11.3.5 | Redrafted | Additional guidance on the factors considered in undertaking a misrouting risk assessment | 1 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| | G 3.1.3.6 | New | Cross reference to section 3.5.1 for guidance on using a PRI in lieu of an outer splitting distant aspect. | 1 |
| G 3.11.3.6 | G 3.11.3.7 | Revised | Figure 15 renumbered as Figure 19 and revised to show MSBD | 2 |
| **4.1.1** | Title changed to **Showing a signal OFF indication** | | | |
| 4.1.1.1 | 4.1.1.1 | Revised | Requirement revised to clarify that a signal OFF indication can be provided with a signal that is not located at a platform | 2 |
| G 4.1.1.2 | G 4.1.1.2 | Revised | Rationale clarified to confirm that a signal OFF indication is part of a dispatch system | 2 |
| G 4.1.1.3 | G 4.1.1.3 | No change | | |
| | G 4.1.1.4 | New | Rationale on driveability added | 2 |
| G 4.1.1.4 | G 4.1.1.5 | Renumbered | No change | |
| G 4.1.1.5 | G 4.1.1.6 | Renumbered | No change | |
| G 4.1.1.6 | G 4.1.1.7 | Renumbered | No change | |
| G 4.1.1.7 | G 4.1.1.8 | Renumbered | No change | |
| **4.2.1** | Title changed to **Showing locally monitored infrastructure indications** | | | |
| 4.2.1.1 | 4.2.1.1 | No change | | 2 |
| G 4.2.1.2 | G 4.2.1.2 | No change | | |
| G 4.2.1.3 | G 4.2.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.2.1.4 | G 4.2.1.4 | No change | | |
| G 4.2.1.5 | G 4.2.1.5 | Redrafted | Guidance provides an explanation of what ‘points set’ means | 2 |
| G 4.2.1.6 | G 4.2.1.6 | Revised | Guidance on protecting locally monitored points using a stop board is deleted | 2 |
| G 4.2.1.7 | G 4.2.1.7 | Redrafted | Guidance clarifies the purpose of the stop board | 2 |
| G 4.2.1.8 to G 4.2.1.12 | G 4.2.1.8 to G 4.2.1.12 | No change | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| **4.2.2** | **Consistency of locally monitored infrastructure indications** | | | |
| 4.2.2.1 | 4.2.2.1 | Redrafted | Requirement redrafted to clarify that where a line incorporates multiple locations where trains operate over locally monitored infrastructure, the order of indications shown for similar operations at each location shall be the same | 2 |
| G 4.2.2.2 | G 4.2.2.2 | No change | | |
| G 4.2.2.3 | G 4.2.2.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.2.2.4 | G 4.2.2.4 | No change | | |
| G 4.2.2.5 | G 4.2.2.5 | Redrafted | Guidance redrafted to use correct terminology for no signaller token block (NST) and simplified | 2 |
| G 4.2.2.6 | G 4.2.2.6 | No change | | |
| **4.3.1** | Title changed to **Showing the 'facing points set' indication** | | | |
| 4.3.1.1 | 4.3.1.1 | Redrafted | The requirement is redrafted to clarify that the points need to be available for the train in order to show the 'points set' indication | 2 |
| G 4.3.1.2 | G 4.3.1.2 | No change | | |
| G 4.3.1.3 | G 4.3.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.3.1.4 | G 4.3.1.4 | Redrafted | Explanation of that the points set indication means to the driver | 2 |
| G 4.3.1.5 | G 4.3.1.5 | Revised | Clause b) deleted as no instances exist | 2 |
| G 4.3.1.6 | G 4.3.1.6 | No change | | |
| G 4.3.1.7 | G 4.3.1.7 | No change | | |
| **4.3.2** | **Provision of fixed distant boards for points indicators** | | | |
| 4.3.2.1 | 4.3.2.1 | No change | | |
| G 4.3.2.2 | G 4.3.2.2 | No change | | |
| G 4.3.2.3 | G 4.3.2.3 | No change | | |
| G 4.3.2.4 | G 4.3.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.3.2.5 | G 4.3.2.5 | No change | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| **4.3.3** | **Distance between the fixed distant board and the points indicator** | | | |
| 4.3.3.1 | 4.3.3.1 | Revised | Requirement revised to state that minimum signalling braking distance (MSBD) shall be available between the fixed distant board and the points-indicator to which it applies | 2 |
| G 4.3.3.2 | G 4.3.3.2 | Revised | Rationale revised in line with requirement 4.3.3.1 | 2 |
| G 4.3.3.3 | G 4.3.3.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.3.3.4 | G 4.3.3.4 | No change | | |
| G 4.3.3.5 | G 4.3.3.5 | Revised | Figure 16 renumbered as Figure 20 and revised to show MSBD | 2 |
| **4.4** | **Requirement for level crossing operating indications** | | | |
| 4.4.1 | 4.4.1 | No change | | |
| G 4.4.2 | G 4.4.2 | No change | | |
| G 4.4.3 | G 4.4.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.4.4 | G 4.4.4 | Redrafted | Guidance on the purpose of the ‘infrastructure not operated’ indication | 2 |
| G 4.4.5 | G 4.4.5 | No change | | |
| **4.5.1** | **Position of BU indicators** | | | |
| 4.5.1.1 | 4.5.1.1 | No change | | |
| G 4.5.1.2 | G 4.5.1.2 | No change | | |
| G 4.5.1.3 | G 4.5.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.5.1.4 | G 4.5.1.4 | No change | | |
| G 4.5.1.5 | G 4.5.1.5 | No change | | |
| G 4.5.1.6 | G 4.5.1.6 | No change | | |
| **4.6.1** | **Indications at locally monitored trailing points** | | | |
| 4.6.1.1 | 4.6.1.1 | No change | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 4.6.1.2 | G 4.6.1.2 | No change | | |
| G 4.6.1.3 | G 4.6.1.3 | No change | | |
| G 4.6.1.4 | G 4.6.1.4 | Redrafted | Guidance that the change of indication informs the train driver that the points are available for the train movement | 2 |
| G 4.6.1.5 | G 4.6.1.5 | No change | | |
| G 4.6.1.6 | G 4.6.1.6 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.6.1.7 | G 4.6.1.6 | No change | | |
| **4.6.2** | **TPWS indications where there is a locally monitored level crossing** | | | |
| 4.6.2.1 | 4.6.2.1 | No change | | |
| G 4.6.2.2 to G 4.6.2.3 | G 4.6.2.2 to G 4.6.2.3 | No change | | |
| G 4.6.2.4 | G 4.6.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.6.2.5 to G 4.6.2.7 | G 4.6.2.5 to G 4.6.2.7 | No change | | |
| **4.7.1** | Title changed to **Showing the trip-cock test indication** | | | |
| 4.7.1.1 | 4.7.1.1 | No change | | |
| G 4.7.1.2 | G 4.7.1.2 | No change | | |
| G 4.7.1.3 | G 4.7.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 4.7.1.4 to G 4.7.1.6 | G 4.7.1.4 to G 4.7.1.6 | No change | | |
| **5.1.1** | **Requirements for written instructions on lineside signs** | | | |
| 5.1.1.1 | 5.1.1.1 | No change | | |
| G 5.1.1.2 | G 5.1.1.2 | No change | | |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 5.1.1.3 | G 5.1.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 5.1.1.4 to G 5.1.1.5 | G 5.1.1.4 to G 5.1.1.5 | No change | | |
| **5.2.1** | **Close door and right away indications** | | | |
| 5.2.1.1 | 5.2.1.1 | Redrafted | Requirement redrafted to include terminology for CD and RA and clarify that the indication is lit when the corresponding control device is operated | 2 |
| 5.2.1.2 to 5.2.1.4 | 5.2.1.2 to 5.2.1.4 | No change | | |
| G 5.2.1.5 to G 5.2.1.7 | G 5.2.1.5 to G 5.2.1.7 | No change | | |
| G 5.2.1.8 | G 5.2.1.8 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 5.2.1.9 to G 5.2.1.10 | G 5.2.1.9 to G 5.2.1.10 | No change | | |
| **5.3.1** | Title changed to **Showing a group of loading / unloading indications** | | | |
| 5.3.1.1 | 5.3.1.1 | No change | | |
| G 5.3.1.2 | G 5.3.1.2 | No change | | |
| G 5.3.1.3 | G 5.3.1.3 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 5.3.1.4 to G 5.3.1.6 | G 5.3.1.4 to G 5.3.1.6 | No change | | |
| **5.3.2** | **Loading / unloading indications when a stop aspect is shown** | | | |
| 5.3.2.1 | 5.3.2.1 | Revised | Requirement 5.3.2.1 b) revised to clarify that any loading / unloading indications beyond the signal, for train movements towards the signal, shall be extinguished when the stop aspect is presented | 2 |

| From RIS-0703-CCS issue 1.1 | To RIS-0703-CCS issue 2 | Way forward | Comments | Objective |
|---|---|---|---|---|
| G 5.3.2.2 to G 5.3.2.3 | G 5.3.2.2 to G 5.3.2.3 | No change | | |
| G 5.3.2.4 | G 5.3.2.4 | Redrafted | Reference to driveability hazard precursors provided | 2 |
| G 5.3.2.5 | G 5.3.2.5 | No change | | |