

24-003 Update of RIS-0737-CCS - Signal Sighting Assessment Requirements

[This page should be deleted at the publication stage of the project]

Version:	1.05		
Purpose:	Approval to proceed to consultation		
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Sponsor:	Ged Neacy		
Lead industry committee:	Control, Command and Signalling Standards Committee (CCS SC)	Date:	18 December 2025
Supporting industry committee:	Traffic Operation and Management Standards Committee (TOM SC)	Date:	27 January 2026
Supporting industry committee:	Energy Standards Committee (ENE SC)	Date:	08 January 2026
Supporting industry committee:	Infrastructure Standards Committee (INS SC)	Date:	06 January 2026

Decision

The lead standards committee is asked to **APPROVE** to proceed to consultation. In doing so, the committee has **DECIDED** that the document(s):

- a) Deliver the intentions of the proposal for change.
- b) Are in a suitable state for consultation.
- c) Can be consulted on for withdrawal.

The lead standards committee is also asked to:

- d) **IDENTIFY** any specific stakeholders to be included in the consultation.
- e) **DECIDE** whether the consultation can be carried out within the committee or should be an industry wide consultation.

The supporting standards committees are asked to:

- f) **SUPPORT** to proceed with the above consultation.
- g) **CONSIDER** whether they need any further involvement in the project beyond this stage.

24-003 Update of RIS-0737-CCS - Signal Sighting Assessment 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.

Proposed new documents

Number	Title	Issue
RIS-0737-CCS	Sighting of Signals, Indicators, Signs and Lineside Markers	2
RIS-0733-CCS	Lineside Operational Signs	1.5

Proposed superseded documents

Number	Title	Issue
RIS-0737-CCS	Signal Sighting Assessment Requirements	1
RIS-0733-CCS	Lineside Operational Signs	1.4

Summary

Background and change

RIS-0737-CCS Issue 1 *Signal Sighting Assessment Requirements* sets out requirements and guidance on the collaborative process used by infrastructure managers (IMs) and railway undertakings (RUs) to confirm that signals, lit indicators and lineside operational signs that form part of the lineside signalling system can be reliably detected, read, interpreted and acted upon before a planned change is put into use.

This project addressed the recommendations of the five-year review of RIS-0737-CCS to:

- a. Update the content and extend the scope to include the assessment of trackside visible objects that support the safe operation of trains and are interpreted from a designated operating location, for example, a driving cab or train dispatch location; and
- b. Develop updated good practice in the positioning and configuration of signals, indicators and lineside operational signs.

This project contributes to addressing the recommendation in the RAIB report *Overspeed at Spital Junction, Peterborough, 4 May 2023* that ‘The Rail Safety and Standards Board should review the specifications for the procurement of signal aspects stated within Rail Industry Standard RIS-0737-CCS and Railway Group Standard GKRT0057. This should include consideration of vertical separation and relative brightness of main aspects and junction indicators to understand the effects on conspicuity of the complete signal at distances up to which a signal is required to be readable. The Rail Safety and Standards Board should then consult with industry on the findings of this review and, if appropriate, update the relevant standards which will be used by industry in its specifications for the procurement of signal equipment.’¹

Industry impact due to changes

Impact areas	Scale of impact	Estimated value		
A. Legal compliance and assurance	Low	Not proportionate to quantify		
B. Health, safety and security	Medium	£266,500 over a five-year period		
C. Reliability and operational performance	Low	Not proportionate to quantify		
D. Design and maintenance	Low	Not proportionate to quantify		
E. People, process and systems	Low	Not proportionate to quantify		
F. Environment and sustainability	N/A	-		
G. Customer experience and industry reputation	N/A	-		
Total value of industry opportunity =		£266,500 over a five-year period		
The standards change contribution to the total value of industry opportunity				
<input type="checkbox"/> None or low	<input type="checkbox"/> Minor but useful	<input type="checkbox"/> Moderate	<input checked="" type="checkbox"/> Important / essential	<input type="checkbox"/> Urgent / critical

¹ [RAIB report 10/2024: Overspeed at Spital Junction, Peterborough](#)

Detail

1. What were the objectives associated with this change?

Objective 1 – Extend the scope of sighting assessment to most of the trackside visible objects.

- 1.1 The scope of the sighting assessment process set out in RIS-0737-CCS Issue 1 is lineside operational signs, lit indicators and lineside operational signs that are part of a signalling system.
- 1.2 In accordance with the recommendation from the five-year review of RIS-0737-CCS Issue 1, the scope of proposed Issue 2 was extended to trackside visible objects that are safety-related and interpreted by train operators from a designated operating position, for example multimode traction changeover signs.
- 1.3 The scope of RIS-0737-CCS Issue 2 includes trackside visible objects that:
 - a. Are part of a movement authority system; that is to say, objects that convey information about distance to go, line or direction, or a permissible speed limit;
 - b. Inform the train driving task – for example, multi-mode traction changeover signs, line identifiers;
 - c. Inform the train dispatch task – for example, train dispatch monitors and mirrors; and
 - d. Inform an RU task that is necessary to mitigate a risk during a train operation – for example, location markers and identifiers.
- 1.4 The scope of RIS-0737-CCS Issue 2 excludes lineside markers, signs and information boards:
 - a. That are not described above in 1.3 above;
 - b. That are not defined as lineside operational signs in accordance with RIS-0733-CCS; for example, limited clearance signs, walking route signs;
 - c. If the requirements for sighting are standardised elsewhere, for example:
 - i. Platform stop markers, which are sighted in accordance with RIS-3782-TOM;
 - ii. Temporary or emergency speed restriction signs, which are implemented in accordance with GERT8000 Module SP and RIS-0735-CCS;
 - iii. Signs and indicators provided with planned engineering works, which are sighted in accordance with GERT8000 Module T3;
 - d. That are owned and used by a single IM and do not impact on train operations;
 - e. That are part of the railway infrastructure but not intended to support train operations; for example, mile posts and gradient posts.
- 1.5 The content in Issue 2 was updated to reflect the changes to the lineside operational signs in the Standards Catalogue since Issue 1 was published, including new signs, and new applications of existing signs, which will be added as references in the text.

Objective 2 – Address RAIB recommendation 3 into the overspeed event at Spital Junction on 4 May 2023

- 1.6 The RAIB report into the overspeed event at Spital Junction included a recommendation that RSSB ‘...should review the specifications for the procurement of signal aspects stated within Rail Industry Standard RIS-0737-CCS and Railway Group Standard GKRT0057. This should include consideration of vertical separation and relative brightness of main aspects and junction indicators to understand the effects on conspicuity of the complete signal at distances up to which a signal is required to be readable. The Rail Safety and Standards Board should then consult with industry on the findings of this review and, if appropriate, update the relevant standards which will be used by industry in its specifications for the procurement of signal equipment (paragraph 249c.i and 249c.ii)’.
- 1.7 Relevant content in RIS-0733-CCS and GKRT0057 was reviewed and updated where necessary to address the recommendation.
- 1.8 A technical note was issued to address the RAIB recommendation so that appropriate mitigations can be put in place by industry and not be delayed by the standards publication process. The technical note sets out good practice on the specification and application of a colour light signal fitted with one or more junction indicators, and guidance on how to maintain readability performance for the life of the asset. Industry feedback on the technical note was sought to inform the development of the good practice in RIS-0737-CCS Issue 2.

Objective 3 – Update the content to set out good practice in the sighting of trackside visible objects.

- 1.9 Since RIS-0737-CCS Issue 1 was published in 2016, RSSB has published further standards on the application and assessment of lineside signalling systems and other systems that incorporate trackside visible objects. These include RIS-0713-CCS *Lineside Signalling Layout Driveability Assessment* and RIS-3782-TOM *Car Stop Markers on Station Platforms*, which are added to Issue 2 as references.
- 1.10 Since RIS-0737-CCS Issue 1 was published, the industry has undertaken further work on the application of trackside visible objects on lines where trains are operated using a cab signalling system. Issue two includes updated guidance on undertaking a sighting assessment on lines where trains can be operated using a cab signalling system.
- 1.11 The structure of the content was reviewed and updated using the RSSB template for rail industry standards.
- 1.12 The references, terms and definitions were reviewed and updated to align with the terminology used in recent RSSB standards covering railway signalling topics. The standard was reformatted using the RSSB standards template and the rationale for each requirement was strengthened and linked to the principles that underpin visibility, readability and interpretability of trackside visible objects.
- 1.13 RIS-0733-CCS includes guidance stating that any lineside operational signs that are not part of a signalling system do not need a sighting assessment that conforms with RIS-0737-CCS. This guidance has been revised to clarify that most lineside operational signs require a

sighting assessment as part of ensuring safe integration. This correction to RIS-0733-CCS was made through the minor change process.

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

Objective 1 – Extend the scope of sighting assessment to most of the trackside visible objects.

- 2.1 The content of RIS-0737-CCS was reviewed and updated throughout to remove any implication that the standard applies only to trackside visible objects that are part of a signalling system. The terms ‘signal sighting assessment’ and ‘signal sighting committee’ were replaced with the terms ‘sighting assessment’ and ‘sighting committee’. The title of RIS-0737-CCS was amended to reflect the change of scope.
- 2.2 Signalling system-specific terminology in RIS-0737-CCS was replaced by terminology relating to trackside visible objects, except for requirements and guidance that are specific to lineside signals and indicators. The existing diagrams and images, which show examples of signalling equipment, are retained and supplemented with additional non-signalling examples where appropriate.
- 2.3 The application in the standard of the term ‘infrastructure manager (IM)’ was reviewed and updated to differentiate the responsibilities of an IM as the owner of a trackside visible object from the responsibilities of another IM that could be affected by a planned change.
- 2.4 The guidance on planning and undertaking a sighting assessment in Part 2 of RIS-0737-CCS was updated to include an example of how an assessment of a lineside operational sign can be managed in a proportionate way.
- 2.5 The guidance in RIS-0737-CCS on the applicability of visibility to the interpretability of a trackside visible object was reviewed and updated. This includes guidance on the reliance placed on drivers’ route knowledge and experience as part of safe integration, including guidance on assessing the reliable detection and interpretation of signs that are infrequently used.
- 2.6 RIS-0737-CCS was updated to inform the planning and delivery of sighting assessments on lines where trains can be operated using a cab signalling system. This includes consideration of the impact of any additional factors that may need to be assessed, such as multiple sources of similar information available to drivers.

Objective 2 - Address RAIB recommendation 3 into the overspeed event at Spital Junction on 4 May 2023

- 2.7 The content relating to the sighting of colour light junction signals incorporating a junction indicator in RIS-0737-CCS sections 2.7, 3.7, 4.3 and 4.5 was updated to provide additional guidance on assessing the readability and interpretability of signal aspects that apply to a diverging line at a junction.
- 2.8 The requirements and guidance on the relationship between readability and human perception in RIS-0737-CCS sections 2.7, 4.2 and Appendix F were enhanced to provide additional guidance to junction signal designers and assessors.

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- 2.9 Additional guidance was provided in Part 2 of RIS-0737-CCS on how to confirm that signal aspects and route indications can be reliably associated and read together, including references to relevant content in GKRT0057. This guidance is available to inform decisions taken by those responsible for signal maintenance and component renewals as well as those who manage planned changes and incident investigations. Guidance was provided on the application of sighting assessments following component renewals and as part of routine maintenance inspections, using cab rides.

Objective 3- Update the content to set out good practice in the sighting of trackside visible objects.

- 2.10 The content on the specification of sighting distances and response times for ETCS lineside signs in Part 3 of RIS-0737-CCS was updated to reflect learning and experience from ETCS implementation projects.
- 2.11 The guidance on the contextual factors that are required to be assessed was updated to reflect experience and learning from sighting assessments.
- 2.12 The terms, definitions and references used throughout the standard were updated where necessary. References within the guidance to sighting assessment as a route technical compatibility check were reviewed and removed.
- 2.13 The rationales for each requirement in RIS-0737-CCS were enhanced to explain why conformity is needed and mapped to a set of underlying principles which are listed in section 1.1.
- 2.14 The content of guidance clauses G 2.2.4 and G 2.2.5 in RIS-0733-CCS was amended to clarify that most lineside operational signs require a sighting assessment. Guidance clause G 3.5.5 was amended to align the new terminology used in RIS-0737-CCS Issue 2.

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

- 3.1 Owing to the publication in September 2024 of the RAIB report into the overspeed event at Spital Junction, a high priority was given to the project.
- 3.2 Technical note TN0304 was issued in advance of the proposed publication of RIS-0737-CCS Issue 2 to address the recommendation to RSSB in the RAIB Spital Junction incident report. The technical note was developed as a high priority because it was important to inform industry of the mitigating measures to address the RAIB recommendation as soon as possible, without being delayed by the standards publication process.

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 Sighting assessment is an important part of ensuring safety when making changes, such as adding or modifying signals or signs. It helps confirm that these changes are integrated safely into the railway system. RIS-0737-CCS is available to support the application of risk acceptance principles to satisfy the obligations on transport undertakings set out in the *Railway and Other Guided Transport (Safety) Regulations 2006* (ROGS) (as amended). The sighting assessment process is consistent with the application of the risk evaluation and assessment principle.
- 4.2 The legislation underpinning the need for a sighting assessment has not changed since RIS-0737-CCS Issue 1 was published in 2016; however, there was guidance in the standard that implied that signal sighting is part of a route technical compatibility assessment, which is not the case.
- 4.3 Provision of updated guidance on sighting assessment as part of the safe integration of a change that could affect a trackside visible object will avoid potential misunderstanding of how conformity with RIS-0737-CCS can be used to achieve legal compliance.
- 4.4 There are no changes made to RIS-0737-CCS or RIS-0733-CCS that are directly relevant to legal compliance or assurance.

B. Health, safety and security

- 4.5 The likelihood of an incident or accident increases if a trackside visible object is or becomes difficult to detect, read or interpret, or if there is insufficient time for an authorised user to respond to the information it provides. Any change that negatively impacts the visibility or readability of these objects can increase the likelihood of operating incidents, such as overspeeding, overruns, or problems during power changeovers.
- 4.6 The RAIB report into the overspeed event at Spital Junction highlights that a junction indication shown with a colour light junction signal proceed aspect might not have been conspicuous, causing the driver to misinterpret which line the train would use beyond the junction.
- 4.7 The consequence of a train driver not correctly interpreting the information from a lineside visible object can be serious, leading to multiple injuries or fatalities. The overspeed incident at Spital junction resulted in several minor injuries but did not result in derailment, although it was identified by the RAIB in the post-incident analysis that the train was close to a speed that would have led to overturning. In the absence of data on confusion or misinterpretation caused by degraded information from a lineside visible object, it is assumed that such a failure contributes to one incident in a five-year period resulting in injuries or fatalities. A typical serious incident is assumed to involve a fatality, ten severe injuries and one hundred non-severe injuries. The value of preventing this harm would be £3,330,000, rounded to the nearest one thousand pounds, this is based on the 2024 value

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of preventing a fatality (VPF) of £2,467,000. The table below breaks down the values by fatality/injury category.

Fatalities/injuries category	Number of fatalities/injuries	Equivalence to fatalities	Multiplying factor	Value (£)
Fatality	1	1	1	1*£2,467,000
Severe injuries	10	1/40	10/40 = 0.25	0.25*£2,467,000
Non-severe injuries	100	1/1000	100/1000 = 0.1	0.1*£2,467,000
Total	111			1.35*£2,467,000 = £3,330,000

- 4.8 Assuming that the revisions to RIS-0737-CCS will lead to a 5% reduction in the likelihood of a serious incident by raising awareness and providing guidance and good practice considerations in the design, positioning and maintenance of lineside visible objects, the benefit of the standards change through the reduction of harm to persons would be £166,500. This excludes any benefit from any associated reduction in material damage to rolling stock and infrastructure, which could be orders of magnitude higher. It is judged reasonable to consider a cost of material damage of £2,000,000 per incident which, based on a 5% reduction in the likelihood of an incident being attributed to the standards change, is equivalent to £100,000. The total potential value of the safety-related benefit of the standards change would be £266,500.
- 4.9 The updates to RIS-0737-CCS, including the change of scope to cover most trackside visible objects, will provide a safety benefit by setting out updated good practice on the assessment and testing of visibility and readability performance of colour light signalling assets that can show a signal aspect and route indication combination. The guidance will assist project entities and infrastructure maintenance managers in the safe integration and maintenance of new, modified and renewed lineside signalling equipment so that junction indications shown by colour light signals are conspicuous and can be readily associated with the proceed aspect.

C. Reliability and operation performance

- 4.10 Reliable train operation depends on trackside visible objects being easy to read, understand and respond to effectively. Poor compatibility can result in loss of operational performance if drivers accommodate any difficulty in reading, interpreting or responding to signal aspects and indications by driving more slowly to increase the reading time before the train passes the object.
- 4.11 It is considered that the enhanced guidance and good practice included in RIS-0737-CCS Issue 2 will support drivers in being able to reliably interpret trackside visual objects. However, in the absence of data and because of heavy reliance on the driver's route knowledge, it is judged that the benefit will be low and not proportionate to attempt to quantify.

D. Design and maintenance

- 4.12 RIS-0737-CCS Issue 1 provides examples of good practice designs for lineside signals, indicators and lineside operational signs. The focus of the content is on the management of planned changes, including designs that are available to use in applying the reference system risk acceptance principle.
- 4.13 The good practice guidance on the design and maintenance of the trackside visible objects given in Issue 2 of RIS-0737-CCS will support the driver in correctly interpreting the displayed information. The benefits are therefore considered to be associated with a potential for improved operational performance, which has been addressed under reliability and operational performance in 'C' above, where it is judged that the benefit will be low and not proportionate to quantify.

E. People, process and systems

- 4.14 The requirement for the sighting of lineside operational signs set out in RIS-0733-CCS Issue 1.4 clause 2.2.1 states that 'Each new and modified lineside operational sign shall be sufficiently interpretable in the operational context before it is put into use'. The guidance in G 2.2.5 states that 'Lineside operational signs that are not part of the CCS system do not have to be assessed by a signal sighting committee, however, it is good practice to use collaborative assessment with representatives from user organisations to confirm that the provision, position and alignment of each sign is fit for purpose before it is put into use'.
- 4.15 While the scope of RIS-0737-CCS Issue 1 did not specifically require assessment of these signs by a sighting committee, Part 3 sets out requirements and guidance on the visibility and readability performance applicable to all lineside operational signs in the RSSB Standards Catalogue, expressed as either a baseline response time (BRT) or a minimum readable distance (MRD).
- 4.16 RIS-0737-CCS Issue 2 sets out the requirements of a sighting assessment process that reflects current good practice for the 'collaborative assessment with representatives from user organisations to confirm that the provision, position and alignment of each sign is fit for purpose before it is put into use', as applied on the network. The changes to the standard will aid the understanding of how to plan sighting assessments for lineside operational signs that are proportionate to the risk.
- 4.17 The revision is intended to promulgate existing good practice and contribute to safe and reliable train operations; therefore, it is judged to be not proportionate to quantify the benefit.

F. Environment and social value

- 4.18 The changes to RIS-0737-CCS are not directly relevant to environmental and social value.

G. Customer experience and industry reputation

- 4.19 The changes to RIS-0737-CCS are not directly relevant to customer experience and industry reputation.

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

- 5.1 The update of RIS-0737-CCS is judged to provide a total value to industry opportunity over a five-year period of £266,500 and is categorised as important, as it extends the scope of RIS-0737-CCS and will provide clarity on the assessment of trackside visible objects.

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

- 6.1 The technical work was led by a Control, Command and Communications (CCC) technical specialist, supported by a project manager, and operational, human factors and risk specialists.

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

- 7.1 RIS-0737-CCS Issue 2 and RIS-0733-CCS Issue 1.5 are scheduled to be published in September 2026.

8. How will the industry implement the change?

- 8.1 It is anticipated that IMs and RUs will implement RIS-0737-CCS Issue 2 within their safety management systems. The content of the standard will inform the update of training and competency assessment materials.

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

- 9.1 The twelve-month review of the updated standards will seek feedback from industry representatives. Sighting assessment is an ongoing activity and is applicable to multiple projects that have the potential to impact on the sighting of trackside visible objects. This provides the opportunity to obtain feedback on the fitness for purpose of the updated standards at the twelve-month review.

Appendix A Disposition table RIS-0737-CCS

Table A1: RIS-0737-CCS Issue 1 to RIS-0737-CCS Issue 2

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
Title: Signal Sighting Assessment Requirements	Title: Sighting of Signals, Indicators, Signs and Lineside Markers	Revised – material change	Title changes to reflect the change of scope.	1
Part 1	Part 1	Redrafted – no material change	Purpose added.	1
1.1	1.1	Revised – material change	Word Scope added.	3
1.1.1 1.1.2	1.1.1	Revised – material change	Scope and wording change from ‘signal sighting assessment’ to ‘sighting assessment’ process and to include visible objects as well as lineside signalling assets.	1
N/A	1.1.2	New	New clause to introduce the terminology changes from Issue 1.	1
N/A	1.1.3	New	Detailed setting-out of what the parts and appendices are and where in the standard requirements and guidance reside.	1
N/A	1.1.4	New	Statement that conformity with this standard can be used to fulfil obligations in NTSNs.	1
N/A	1.1.5	New	Like above, conformity with this standard can be used to discharge obligations under ROGs.	3
N/A	1.1.6	New	Statement that this standard can be adopted by IMs and RUs under their SMS and that alternative risk controls to can be used.	3
N/A	1.1.7	New	More detailed explanation of the scope of trackside visual objects conveying information and their relationship to the train driving task.	1

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From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	1.1.8	New	More detailed explanation of what lineside furniture is not included in the standard, or is standardised elsewhere.	1
N/A	1.1.9	New	Statement confirms that the standard supports the integration of trackside visual objects and the RU operational roles.	1
N/A	1.1.10	New	Sets out a suite of principles with which the requirements in the standard are consistent.	1
N/A	1.1.11	New	New statement to highlight the contribution of visibility.	1
N/A	1.1.12	New	New statement to highlight the contribution of readability.	1
N/A	1.1.13	New	New guidance providing a reference to Appendix F.	1
1.2	1.2	Redrafted – no material change	Minor changes to policy wording.	3
1.3	1.3	Redrafted – no material change	Changes to policy wording.	3
1.4	1.4	Redrafted – no material change	Minor changes to policy wording.	3
2.1 Introductory guidance	2.1 Introduction to sighting assessment	Redrafted – no material change	Heading amended for clarity.	3
N/A	G 2.1.1	New	New guidance to introduce new terminology used.	1
2.1.1	G 2.1.2 G 2.1.3	Revised – material change	Wording revised and split into two guidance clauses. Details of other necessary assessments removed. Additional guidance provided, highlighting the purpose of a sighting assessment.	3
2.1.2	G 2.1.17	Revised – material change	Guidance clause relating to other assessments associated with the outputs of a sighting assessment expanded into a list.	3
2.1.3	G 2.1.4	Revised – material change	Guidance clause for risk acceptance principles changed to be more specific to trackside visible objects.	1

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From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 2.1.5	New	New guidance to clause to reference scope in 1.1.7.	3
2.1.4	1.1.6	Revised – material change	Guidance for conformity updated and moved to the appropriate section of the document.	3
2.1.5	G 2.1.21 G 2.1.23	Revised – material change	Guidance redrafted and split into two clauses for clarity.	3
N/A	G 2.1.6	New	New guidance clause to reference section 2.2 for when to apply the sighting process.	3
2.1.6	G 2.1.24	Redrafted – no material change	Minor rewording to remove ‘might’.	3
N/A	G 2.1.7	New	New guidance to explain the relationship of visibility, readability, interpretability and driveability.	1
2.1.7	G 2.1.25	Redrafted – no material change	Minor rewording to align terminology.	1
N/A	G 2.1.8	New	New guidance to support the principles.	3
2.1.8	G 2.1.18	Redrafted – no material change	Reworded for clarity.	3
N/A	G 2.1.9	New	New introductory guidance setting out roles and responsibilities.	3
N/A	G 2.1.10	New	New guidance to support proportionate assessment depending on risk.	1
N/A	G 2.1.11	New	New guidance for planning a proportionate assessment.	1
N/A	G 2.1.12	New	New guidance relating to assessment factors that affect visibility, readability, interpretability and driveability.	3
N/A	G 2.1.13	New	New guidance for specifying the sighting distance.	3
N/A	G 2.1.14	New	New guidance for assessing contextual factors.	3
N/A	G 2.1.15	New	New guidance for the design configuration of trackside visible objects.	1

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From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 2.1.16	New	New guidance regarding the assessment decision.	3
N/A	G 2.1.19	New	New guidance to support maintenance activities.	3
N/A	G 2.1.20	New	New guidance relating to conspicuity of complex objects (RAIB recommendation).	2
N/A	G 2.1.22	New	New guidance to reference RIS-7708-INS and module S7 for reporting sighting issues.	3
2.2.1	2.2.1 G 2.2.7	Revised – material change	Requirement simplified to cover any planned change. Previous list items moved to guidance clause G 2.2.7 to retain detail.	3
G 2.2.1.1	G 2.2.2	Redrafted – no material change	Rationale for 2.2.1 simplified by removing examples. Intention of the clause remains unchanged.	3
G 2.2.1.2	G 2.2.3	Redrafted – no material change	Rationale for 2.2.1, reworded to simplify language.	3
N/A	G 2.2.4	New	New rationale to support the principles of requirement 2.2.1.	3
N/A	G 2.2.5	New	New guidance clause providing a link to the scope and exclusions.	1
G 2.2.1.3	G 2.2.6	Converted to guidance	Previous rationale for 2.2.1 moved to guidance. The clause was not previously worded as Rationale. Terminology for ‘sighting assessment’ updated, and ‘required readable distance’ updated to ‘sighting distance’	1
G 2.2.1.4	G 2.2.8	Redrafted – no material change	Minor rewording for clarity.	3
G 2.2.1.5	G 2.2.9	Revised – material change	Previous clause listed examples of infrastructure change that could require a sighting assessment. These are also contained in RIS-7708-INS. Clause replaced with a reference to RIS-7708-INS to avoid duplication.	3
G 2.2.1.6	G 2.2.10	Redrafted – no material change	Minor change to update terminology to ‘Sighting Assessment’.	3

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From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.2.1.7	G 2.2.11	Redrafted – no material change	Minor change to update terminology to ‘Sighting Assessment’. Additional list item because of point c), split into two list items: a) and d).	3
N/A	2.3.1	New	New requirement for the ‘Proposer’ to inform the IM of changes that can affect sighting.	3
2.3.1	2.3.2 2.3.3	Revised – material change	IM responsibilities reworded to provide greater clarity for the role in the assessment process. List item c) has been moved to clause 2.3.3.	3
G 2.3.1.2	G 2.3.6	Redrafted – no material change	Rationale for maintaining signal sighting reworded. The term ‘Lineside signalling system’ has been replaced with ‘Lineside visible objects’.	1
N/A	G 2.3.4	New	New rationale to highlight the role of ROGS and CSM REA in the assessment process.	3
G 2.3.1.3	G 2.3.10	Revised – material change	Guidance for committee members' expertise has been reworded for clarity and to remove the term ‘should’.	3
G 2.3.1.4	G 2.3.5	Revised – material change	Previous guidance on the Proposer's responsibilities in clause 2.3.1.4 has been reworded for clarity and used as a rationale.	3
G 2.3.1.5	N/A	Withdrawn	Responsibilities of the Proposer are covered in G 2.3.5	3
N/A	G 2.3.9	New	New rationale to support the principles of requirements.	3
G 2.3.1.6	G 2.3.17	Redrafted – no material change	Guidance clause relating to affected parties reworded. List items expanded for greater clarity.	3
N/A	G 2.3.8	New	New rationale to support requirement 2.3.3.	3
N/A	G 2.3.11	New	New guidance to support the validation of roles using a competency management system.	3
N/A	G 2.3.12	New	New guidance to support the validation of roles using a competency management system.	3
N/A	G 2.3.13	New	New guidance for nominating a Chair, to support clause 2.3.2.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 2.3.14	New	New guidance for using a third-party Chair.	3
N/A	G 2.3.16	New	New guidance for a person fulfilling more than one role.	3
N/A	G 2.3.18	New	New guidance clause providing a link to the roles section.	3
2.3.2	2.4.1	Redrafted – no material change	Minor rewording to update roles.	3
G 2.3.2.2	G 2.4.4	Redrafted – no material change	Rationale clause reworded for current terminology and clarity.	3
G 2.3.2.3	G 2.3.15 G 2.4.7	Revised – material change	Previous rationale reworded and simplified for guidance. Additional list items moved to guidance clause G 2.4.7 and aligned to current practice.	3
G 2.3.2.4	G 2.4.10	Revised – material change	Previous rationale reworded for clarity, and list items simplified for better understanding.	3
G 2.3.2.5	G 2.4.12	Redrafted – no material change	Minor rewording for consistency of terminology.	1
G 2.3.2.6	G 2.4.13	Redrafted – no material change	Minor rewording for consistency of terminology.	1
G 2.3.2.7	G 2.4.14	Revised – material change	Revised to include two additional examples of operational incidents and removal of item relating to car stop markers as these are out of scope.	3
N/A	2.4.2	New	New requirement for an IM Technical Expert for scenarios where the design or configuration of an infrastructure asset is relevant.	3
2.3.3	2.4.3	Revised – material change	Additional list items provided to detail applicable changes to the signalling system. Wording and terminology updated.	3
G 2.3.3.1	G 2.4.4	Revised – material change	Rationale clause reworded for current terminology and clarity.	3
N/A	G 2.4.5	New	New rationale for the technical expert role.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 2.4.6	New	New rationale to support the principles of requirements.	3
N/A	G 2.4.8	New	New guidance for the competency of the Chair role.	3
N/A	G 2.4.9	New	New guidance detailing the contribution of the IM Operator.	3
N/A	G 2.4.11	New	New guidance for the competency of the IM Operator role.	3
N/A	G 2.4.17	New	New guidance for the competency of the Technical Expert role.	3
G 2.3.3.2	G 2.4.18	Revised – material change	Guidance clause amended for current terminology and moved to a specific section for the IM Technical Expert role. List items revised and amended.	1
G 2.3.3.3	G 2.4.16	Revised – material change	Guidance clause amended for current terminology and moved to a specific section for the IM Technical Expert role. List items revised and amended.	1
2.3.4	2.5.1	Revised – material change	Terminology updated for consistency, ‘RU’ replaced with ‘transport operators’.	3
G 2.3.4.1	N/A	Withdrawn	Previous rationale was not relevant to the requirement.	3
G 2.3.4.2	G 2.5.3	Redrafted – no material change	Terminology updated and clause simplified as rationale.	3
N/A	G 2.5.4	New	New rationale to support the principles of requirements.	3
G 2.3.4.3	G 2.5.9	Revised – material change	Clause revised and included ‘level crossing operation’ as an additional example.	3
G 2.3.4.4	N/A	Withdrawn	Clause withdrawn as this duplicated the operating processes from guidance clause G 2.3.4.3.	3
G 2.3.4.5	N/A	Withdrawn	Guidance withdrawn as unnecessary, as the requirement in 2.5.2 provides clarity on who is required.	3
2.3.5	2.5.2	Revised – material change	Requirement replaced with a clause that requires transport operators to possess sufficient knowledge and expertise to fulfil their role.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.3.5.1	G 2.5.3	Revised – material change	Terminology simplified and clause reworded to incorporate the term ‘transport operators’.	3
G 2.3.5.2	G 2.5.11	Redrafted – no material change	Reworded to remove car stop markers as these are out of scope.	3
2.4.1	2.5.1 2.5.2	Revised – material change	Requirements are incorporated into clauses that require transport operators to possess sufficient knowledge and expertise to fulfil their role.	3
G 2.4.1.1.	G 2.5.3	Revised – material change	Terminology simplified and clause reworded to incorporate the term ‘transport operators’.	3
G 2.4.1.2	G 2.5.5	Revised – material change	Guidance for the transport operator (RU) experience reworded and list examples provided.	3
G 2.4.1.3	G 2.5.10	Redrafted – no material change	Minor rewording for clarity and to improve list items.	3
2.4.2	2.5.1 2.5.2	Revised – material change	Requirement incorporated into the general requirements for transport operators.	3
G 2.4.2.1	G 2.5.5	Revised – material change	Guidance for the transport operator (RU) experience reworded and list examples provided.	3
G 2.4.2.2	G 2.5.6	Revised – material change	Reworded to confirm who stakeholders need to confirm capability with. Terminology also aligned.	3
2.5.1	2.5.1 2.5.2	Revised – material change	Requirement incorporated into the general requirements for transport operators.	3
G 2.5.1.1	N/A	Withdrawn	Rationale no longer required as the requirement is merged under stakeholders. IM (stations) contribution is covered in G 2.5.4 and 2.5.12.	3
G 2.5.1.2	N/A	Withdrawn	Replaced with the competency clause in G 2.5.7.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.5.1.3	G 2.5.12	Redrafted – no material change	Guidance clause reworded with updated terminology.	1
2.5.2	2.5.1 2.5.2	Revised – material change	Requirement incorporated into the general requirements for transport operators.	3
G 2.5.2.1	N/A	Withdrawn	Duplicate rationale withdrawn (duplicates G 2.4.2.1).	3
G 2.5.2.2	G 2.5.6	Revised – material change	Reworded to confirm who stakeholders need to confirm capability with. Terminology also aligned.	3
N/A	G 2.5.7	New	New guidance for best practice in managing the competency of stakeholders.	3
N/A	G 2.5.8	New	New guidance clarifies that a transport operator can be an RU, an IM, or both.	3
N/A	G 2.5.13	New	New guidance for third-party transport undertaking representatives.	3
2.6.1	2.6.4	Revised – material change	Requirement amended to reflect current practice and clarify role.	3
G 2.6.1.1	G 2.6.6	Revised – material change	Previous rationale for stakeholder consultation reworded as guidance.	3
G 2.6.1.2	N/A	Withdrawn	Previous rationale superseded by the principles provided in Section 2.6.8.	3
G 2.6.1.3	G 2.6.5	Revised – material change	Previous guidance expanded for clarity of role and reworded to provide a clearer rationale.	3
2.6.2	2.6.1	Redrafted – no material change	Minor rewording and list formatting.	3
N/A	2.6.2	New	New requirement for assessing contextual factors associated with signals and indicators.	3
N/A	2.6.3	New	New requirement for assessing contextual factors associated with signs and train dispatch systems.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.6.2.1	N/A	Withdrawn	Previous rationale replaced with a more appropriate rationale linked to the principles.	3
G 2.6.2.2	G 2.6.10	Redrafted – no material change	Guidance updated to reflect new terminology.	1
G 2.6.2.3	G 2.6.9	Revised – material change	Guidance clause reworded and simplified into list items for clarity.	3
G 2.6.2.4	G 2.6.7	Redrafted – no material change	Guidance updated to reflect new terminology and reworded for clarity.	3
N/A	G 2.6.8	New	New rationale to support the principles of requirements.	1
G 2.6.2.5	G 2.6.11	Redrafted – no material change	Guidance reworded for clarity and accuracy.	3
N/A	G 2.6.12	New	New guidance provided for consulting with affected stakeholders prior to planning an assessment.	3
G 2.6.2.6	G 2.6.13	Redrafted – no material change	Minor rewording for clarity and aligning terminology.	3
N/A	G 2.6.14	New	New guidance provided for achieving efficiencies by understanding risk and applicable contextual factors at an early stage.	1
N/A	G 2.6.15	New	New guidance offers best practices for identifying relevant contextual factors.	1
N/A	G 2.6.16	New	New guidance provides an example to help determine the relevant contextual factors.	1
N/A	G 2.6.17	New	New guidance provides an example to help determine the relevant contextual factors.	1
G 2.6.2.7	N/A	Withdrawn	Guidance clause reproduced information already included in this section.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.6.2.8	G 2.6.18	Revised – material change	Reworded for clarity and to remove the term ‘should’.	3
G 2.6.2.9	G 2.6.19	Revised – material change	Guidance clause updated to incorporate current practice.	3
G 2.6.2.10	G 2.6.20	Redrafted – no material change	Minor rewording to adjust the statement's format.	3
G 2.6.2.11	G 2.6.21	Redrafted – no material change	Minor rewording to adjust the statement's format and remove list items.	3
G 2.6.2.12	G 2.6.22	Revised – material change	Guidance revised to include competency and improved detail in list items.	3
G 2.6.2.13	G 2.6.23	Redrafted – no material change	Guidance reworded and reordering of list items.	3
G 2.6.2.14	G 2.6.24	Redrafted – no material change	Minor rewording to adjust the statement's format.	3
G 2.6.2.15	G 2.6.25 G 2.6.26 G 2.6.27	Revised – material change	Minor rewording for clarity and format. New list item included to determine the applicability of ‘readability’ or ‘visibility’. Additional details for monitoring change removed from list item d) and put in separate clauses G 2.6.26 & G 2.6.27.	3
G 2.6.2.16	N/A	Withdrawn	Guidance statement relating to assessment by correspondence by a dedicated section, G 2.7.13 – G 2.7.18.	1
G 2.6.2.17	N/A	Withdrawn	Guidance statement relating to assessment by correspondence replaced by a dedicated section, G 2.7.13 – G 2.7.18.	1
G 2.6.2.18	G 2.10.8	Revised – material change	Guidance clause reworded for better clarity and moved to the appropriate section for ‘object configuration’.	3
G 2.6.2.19	N/A	Withdrawn	Duplicated guidance is not relevant to this section but can be found in G 2.10.8.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.6.2.20	N/A	Withdrawn	Duplicated guidance is not relevant to this section but can be found in G 2.10.8.	3
2.7.1	2.3.3	Revised – material change	Requirement for the Chair to confirm quoracy moved to the responsibilities section.	3
G 2.7.1.1	G 2.3.7	Revised – material change	Requirement for the Chair to confirm quoracy moved to the responsibilities section. Rationale expanded for clarity.	3
G 2.7.1.2	G 2.3.19	Redrafted – no material change	Requirement for the Chair to confirm quoracy moved to the responsibilities section. Minor rewording to align with current terminology.	3
G 2.7.1.3	G 2.3.21	Redrafted – no material change	Requirement for the Chair to confirm quoracy moved to the responsibilities section.	3
G 2.7.1.4	G 2.3.21	Revised – material change	Requirement for the Chair to confirm quoracy moved to the responsibilities section and reworded to align with current industry practice.	3
G 2.7.1.5	G 2.3.22	Revised – material change	Requirement for the Chair to confirm quoracy moved to the responsibilities section.	3
2.7.2	2.7.1	Redrafted – no material change	Requirement reworded and split into two list items for clarity.	3
G 2.7.2.1	G 2.7.2	Redrafted – no material change	Rationale reworded to align with current terminology.	3
N/A	G 2.7.3	New	New rationale to support requirement 2.7.1.	3
G 2.7.2.2	G 2.7.4	Redrafted – no material change	Rationale reworded to align with current terminology and to improve clarity.	1
N/A	G 2.7.5	New	New rationale to support the principles of requirements.	3
G 2.7.2.3	G 2.7.6	Redrafted – no material change	Guidance reworded to align with new terminology and to improve clarity.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 2.7.7	New	New guidance on the benefits of evaluating the impact of the change before conducting an assessment.	3
N/A	G 2.7.8	New	New guidance advising the benefits of conducting an assessment in the real operating environment.	3
G 2.7.2.4	G 2.7.9	Redrafted – no material change	Guidance reworded to align with new terminology and to improve clarity.	3
G 2.7.2.5	N/A	Withdrawn	Guidance for approving simulation tools has been removed, as it is now implied throughout this section.	3
G 2.7.2.6	G 2.7.10	Revised – material change	Guidance restructured and reworded. List items provided for clarity.	3
G 2.7.2.7	N/A	Withdrawn	Guidance withdrawn as this statement has been included as list item c) in G 2.7.10.	3
G 2.7.2.8	G 2.7.11	Redrafted – no material change	Guidance redrafted to align with new terminology.	3
G 2.7.2.9	G 2.7.12	Revised – material change	Guidance redrafted to align with new terminology.	3
2.7.3	2.8.1 2.8.2 2.8.3	Revised – material change	Previous requirement containing list items replaced by separate requirements for clarity. New terminology for Required Visible Distance introduced. Term ‘required readable distance’ replaced by ‘sighting distance’ as a generic term.	3
N/A	G 2.8.5	New	New rationale provided to support the new principle of ‘readability’ and ‘visibility’.	3
G 2.7.3.1	G 2.8.6	Revised – material change	Rationale revised to account for readability and visibility to align with the new principle of assessment.	3
N/A	G 2.8.8	New	New rationale to support the principles of requirements.	3
N/A	G 2.8.9	New	New guidance to outline the contribution of visibility to interpretability.	1

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 2.8.10	New	New guidance to outline the contribution of readability to interpretability.	1
G 2.7.3.2	G 2.8.13	Revised – material change	Guidance relating to the maintenance of sighting distances reworded for new terminology.	1
G 2.7.3.3 G 2.7.3.4	G 2.8.11	Revised – material change	Two previous guidance clauses combined into a single statement for improved coherence.	3
G 2.7.3.5	N/A	Withdrawn	Previous guidance for a single asset requiring a single readable distance has been removed; this is implied by complex assets that require more than one sighting distance.	1
G 2.7.3.6	G 2.8.18	Revised – material change	Guidance enhanced relating to complex assets with multiple sighting distances.	2
G 2.7.3.7	G 2.8.19	Redrafted – no material change	Guidance reworded for clarity. Figure 1 redrawn, but details retained.	3
G 2.7.3.8	G 2.8.14	Redrafted – no material change	Minor amendments to align terminology.	3
N/A	G 2.8.15	New	New guidance to highlight risks of inadequate sighting time.	3
N/A	G 2.8.16	New	New guidance for the interpretability of complex trackside visible objects.	2
N/A	G 2.8.17	New	New guidance for assessing dynamic conditions of complex trackside visible objects.	2
G 2.7.3.9	G 2.8.20	Revised – material change	Previous guidance supported by an illustrated example (Figure 2). Guidance clause reworded to make it specific to the example shown. Generic wording given specific values in accordance with the illustration.	3
G 2.7.3.10	G 2.8.21	Revised – material change	Guidance revised and formatted to provide list items for clarity.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 2.8.22	New	New guidance for sighting junction indicators with respect to junction signals.	2
N/A	G 2.8.23	New	New guidance for sighting where junction aspect sequences are utilised.	2
G 2.7.3.11	G 2.8.24	Redrafted – no material change	Guidance reworded to simplify statement and provide reference to RIS-0703-CCS.	3
2.7.4	2.8.4	Redrafted – no material change	Revised to update terminology.	1
G 2.7.4.1	G 2.8.7	Revised – material change	Rationale to support requirement 2.8.4. Revised to update terminology.	1
G 2.7.4.2	N/A	Withdrawn	Previous guidance was no longer useful as the associated requirement has now been merged with a new section.	3
G 2.7.4.3	G 2.8.12	Revised – material change	Guidance redrafted as a good practice statement.	3
2.7.5	2.10.1 2.10.2	Revised – material change	List items in the previous requirement did not apply in all situations. The previous requirement has been split into two separate requirements to define what configuration checks are required for all trackside visible objects and which apply to signals and indicators. Reworded to align terminology.	3
G 2.7.5.1	G 2.10.3	Redrafted – no material change	Additional rationale included in the clause to highlight the effects on conspicuity in line with the RAIB report 10/2024.	2
N/A	G 2.10.4	New	New rationale to support the new [split] requirement 2.10.2.	3
N/A	G 2.10.5	New	New rationale providing the principles that underpin the requirement.	3
G 2.7.5.2	G 2.10.6 G 2.10.8	Revised – material change	Previous guidance is split into two separate guidance clauses with additional references provided.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 2.10.7	New	New guidance clause to support conspicuity of complex trackside visible objects.	2
G 2.7.5.3	G 2.10.18 G 2.10.19 G 2.10.20 G 2.10.21 G 2.10.22	Revised – material change	Previous guidance clause split into five separate clauses. Clauses reworded for clarity and to support coherence as individual clauses.	3
G 2.7.5.4	G 2.10.9 G 2.10.11	Revised – material change	Previous guidance clause split into two separate clauses, with additional content included for clarity and to support coherence as individual clauses.	3
G 2.7.5.5	G 2.10.10	Revised – material change	Guidance simplified and second sentence incorporated into G 2.10.11.	3
G 2.7.5.6	G 2.10.12 G 2.10.13	Revised – material change	Previous guidance clause split into two separate clauses with additional content included for clarity and to support coherence as individual clauses.	3
N/A	G 2.10.14 G 2.10.15	New	New guidance to provide a typical value for the height of operational signs and highlight the benefits of consistency.	3
G 2.7.5.7	G 2.10.24 G 2.10.26	Redrafted – no material change	Minor rewording for technical clarity. Guidance clause split between two clauses.	3
G 2.7.5.8	G 2.10.16	Redrafted – no material change	Minor rewording for technical clarity.	3
G 2.7.5.9	G 2.10.30	Redrafted – no material change	Minor format change to align subheading.	3
G 2.7.5.10	G 2.10.27	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.7.5.11	G 2.10.17	Revised – material change	Guidance referencing GCRT5212 updated to GIRT7073.	3
G 2.7.5.12	G 2.10.31	Redrafted – no material change	Reference to GKGNO657 updated to GKRT0057.	3
N/A	G 2.10.23	New	New guidance provided to highlight where efficiencies can be made in the assessment process.	1
N/A	G 2.10.25	New	New guidance provides good practice for assessing colour light junction signals.	2
N/A	G 2.10.28 G 2.10.29	New	New guidance on Backboards to support conspicuity of signals.	2
2.7.6	2.11.1	Revised – material change	Listing of specific contextual factors removed from this clause as these are specified in subsequent requirements.	3
G 2.7.6.1	G 2.11.12	Revised – material change	Previous rationale reworded as guidance.	3
G 2.7.6.2 G 2.7.6.3	G 2.11.13	Revised – material change	Previous two guidance clauses simplified and merged into one clause.	3
N/A	G 2.11.10	New	New rationale providing the principles that underpin the requirement.	3
N/A	G 2.11.11	New	New guidance providing the committee’s role in identifying contextual factors.	3
G 2.7.6.4	G 2.11.14	Revised – material change	Guidance clause amended to align terminology and provide cross reference to the assessment process section.	3
G 2.7.6.5	N/A	Withdrawn	Guidance for efficiencies in the assessment process withdrawn, these are included in the relevant section G 2.6.14.	1

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.7.6.6	N/A	Withdrawn	Guidance for the assessment of relevant contextual factors are withdrawn as these are included in the Assessment Plan sections G 2.6.15 and G 2.6.16.	3
G 2.7.6.7	G 2.11.15	Redrafted – no material change	Guidance clause reworded to align terminology.	3
G 2.7.6.8	G 2.11.16	Redrafted – no material change	Guidance clause reworded to align terminology.	3
G 2.7.6.9	G 2.11.17	Redrafted – no material change	Guidance clause reworded to align terminology.	3
G 2.7.6.10	G 2.11.21	Redrafted – no material change	Guidance updated with new terminology.	3
2.7.7	2.11.2	Redrafted – no material change	Requirement updated with new terminology.	3
G 2.7.7.1	G 2.11.7	Redrafted – no material change	Rationale reworded to align terminology.	3
G 2.7.7.2	N/A	Withdrawn	Guidance clause withdrawn as no longer needed. Was provided to support a standalone clause.	3
2.7.8	2.11.3	Redrafted – no material change	Requirement updated with new terminology.	3
G 2.7.8.1	G 2.11.8	Revised – material change	Rationale revised to better support requirement 2.11.3.	3
G 2.7.8.2	N/A	Withdrawn	Guidance clause withdrawn as no longer needed. Was provided to support a standalone clause.	3
2.7.9	2.11.4	Redrafted – no material change	Requirement updated with new terminology.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.7.9.1	G 2.11.9	Redrafted – no material change	Rationale expanded to provide associated risks in support of the requirement in 2.11.4 and incorporate additional guidance from G 2.7.10.1.	3
G 2.7.9.2	N/A	Withdrawn	Guidance clause withdrawn as no longer needed. Was provided to support a standalone clause.	3
G 2.7.9.3	G 2.11.18	Revised – material change	Guidance reworded to provide clarity.	3
2.7.10	2.11.5	Redrafted – no material change	Requirement updated with new terminology.	3
G 2.7.10.1	G 2.11.9	Revised – material change	Rationale clause merged with and reworded to provide consistent terminology.	1
G 2.7.10.2	G 2.11.18	Redrafted – no material change	Guidance clause duplicated. Clause merged with and reworded to provide consistent terminology.	3
N/A	2.11.6	New	New requirement for the sighting committee to specify SRT duration required to mitigate the contextual factors.	3
N/A	G 2.11.19	New	New guidance for contextual factors that change over time.	3
N/A	G 2.11.20	New	New guidance supporting decisions when contextual factors affect existing assets.	3
2.8.1	2.12.1	Revised – material change	Requirement revised to incorporate new terminology and additional list item d) for the position of an object.	3
G 2.8.1.1	G 2.12.4	Revised – material change	Previous rationale reworded as guidance.	3
G 2.8.1.2	G 2.12.2	Revised – material change	Rationale expanded to be more concise.	3
N/A	G 2.12.3	New	New rationale providing the principles that underpin the requirement.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.8.1.3	N/A	Withdrawn	Guidance relating to a pass/fail conclusion removed as this is not an accurate reflection of the process.	3
G 2.8.1.4 G 2.8.1.5	G 2.12.5	Revised – material change	Two guidance clauses merged into one statement. Terminology aligned for consistency.	3
G 2.8.1.6	G 2.12.6	Revised – material change	Minor rewording to include new terminology. Additional list item added from clause G 2.9.1.7.	3
G 2.8.1.7	G 2.12.6 c)	Revised – material change	Guidance added to guidance clause G 2.12.6 as list item c). Terminology aligned.	3
G 2.8.1.8	G 2.12.7	Redrafted – no material change	Minor amendment to terminology.	3
2.9.1	2.13.1	Revised – material change	Requirement amended to clarify ‘who’ retains record, and removal of list item b) as this is already in the assessment plan a). Minor clarifications included.	3
G 2.9.1.1	G 2.13.2	Redrafted – no material change	Minor rewording and alignment of terminology.	3
G 2.9.1.2	N/A	Withdrawn	Rationale clause was of no benefit to the user in this section as it related to the plan content.	3
G 2.9.1.3	G 2.13.3	Redrafted – no material change	Minor rewording and alignment of terminology.	3
G 2.9.1.4	G 2.13.4	Redrafted – no material change	Minor rewording and alignment of terminology.	3
N/A	G 2.13.6	New	New rationale providing the principles that underpin the requirement.	3
G 2.9.1.5	G 2.13.7	Redrafted – no material change	Minor rewording to align terminology.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 2.9.1.6	G 2.13.5	Redrafted – no material change	Minor rewording and alignment of terminology.	3
Part 3 Compatibility performance requirements	Part 3 Readability and Visibility performance requirements	Revised – material change	Updated to reflect the inclusion of the terms 'readability' and 'visibility'.	1
3.1 Introductory guidance	3.1 Guidance on sighting distance and time parameters	Revised – material change	Subheading updated to more accurately reflect the contents.	1
3.1.1	G 3.1.1	No change	-	-
3.1.2	G 3.1.4	No change	-	-
3.1.3	G 3.1.5	Revised – material change	Updated to include all trackside visible objects. No longer IM specific.	1
3.1.4	G 3.1.6	Revised – material change	Updated to omit inference that clause applies solely to signals. Now refers to risk control measures rather than performance requirements.	1
3.2 Minimum readable distance	3.2 Minimum sighting distance specification	Redrafted – no material change	Subheading edited to include visibility-based track side objects.	1
3.2.1	3.2.1	Redrafted – no material change	Edited formula to replace 'readable' with 'sighting'. Table amended to include ETCS stop markers.	1
G 3.2.1.1	G 3.2.2	Revised – material change	Revised in line with objective 1 from the BCfC.	1
G 3.2.1.3	G 3.2.3	No change	-	-
G 3.2.1.3	G 3.2.4	Revised – material change	Edited for clarity.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 3.2.5	New	Clause added to reaffirm the purpose of the prior requirements; how these align with 'interpretability' and 'driveability'.	1
G 3.2.1.4	G 3.2.6	Revised – material change	Minimum sighting distance' vice 'minimum readable distance'.	1
G 3.2.1.5	G 3.2.7	No change	-	-
G 3.2.1.6	G 3.2.8	Revised – material change	Edited to provide clarity through context.	3
N/A	G 3.2.9	New	Calculation provided for conversion of mph to m/s - supporting previous clause	3
G 3.2.1.7	G 3.2.10	Revised – material change	Edited for clarity. Replaced 'readable' with 'sighting'.	1
G 3.2.1.8	G 3.2.11	Revised – material change	Minimum sighting distance' vice 'minimum readable distance'. Edited to remove 'should'.	1
G 3.2.1.9	G 3.2.12	Revised – material change	Edited to account for table number change. 'Minimum sighting distance' vice 'MRD'.	1
G 3.2.1.10	G 3.2.13	Revised – material change	Edited to include visibility-based track side objects within the requirement.	1
N/A	G 3.2.14	New	Contextual examples of readability added.	2
G 3.2.1.11	G 3.2.15	Redrafted – no material change	Edited for conciseness.	3
G 3.2.1.12	G 3.2.16	Revised – material change	Minimum sighting distance' vice 'minimum readable distance'.	1
N/A	G 3.2.17	New	Extrapolated from the Issue 1 'G 3.2.1.12' clause as separate guidance clause for better clarity.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 3.2.18	New	Extrapolated from the Issue 1 'G 3.2.1.11' clause as separate guidance clause for better clarity	3
G 3.2.1.13	G 3.2.19	Revised – material change	Minimum sighting distance' vice 'required readable distance'.	1
N/A	G 3.2.20 G 3.2.21 G 3.2.22	New	New guidance relating to new scenario - ETCS stop markers	1
G 3.2.1.14	G 3.2.23	Revised – material change	Scenario number updated in line with table. Edited for clarity, better context and reference to RIS-0793-CCS rather than GKRT0192.	3
G 3.2.1.15	G 3.2.24	Revised – material change	Scenario number updated in line with table. Edited for better readability. 'Lineside signalling asset' replaced with 'trackside visible object'.	3
G 3.2.1.16	G 3.2.25	Redrafted – no material change	Scenario number updated in line with table.	3
G 3.2.1.17	G 3.2.26	Redrafted – no material change	Scenario number updated in line with table.	3
G 3.2.1.18	G 3.2.27	Redrafted – no material change	Scenario number updated in line with table.	3
G 3.2.1.19	G 3.2.28	Redrafted – no material change	Scenario number updated in line with table.	3
G 3.2.1.20	G 3.2.29	Redrafted – no material change	Scenario number updated in line with table.	3
3.2.2	3.3.1	Revised – material change	Edited to encompass trackside visible objects where revised conditions apply (a & b)	1
G 3.2.2.1	G 3.3.2	Revised – material change	Edited to re-term as 'trackside visible object'. Quantitative distance value removed.	1

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 3.3.3	New	Extrapolated out from the previous clause for clarity.	3
N/A	G 3.3.5	New	Clause added to affirm alignment with 'readability' principle.	1
N/A	G 3.3.6	New	Clauses added to provide context to the previous requirements, including quantitative arguments for distance, as well as examples of trackside visible objects that indicate stopping positions.	3
G 3.2.2.2	G 3.3.7	Revised – material change	Guidance reworded for clarity	3
N/A	G 3.3.8	New	New guidance providing example of objects denoting a limit of MA.	3
G 3.2.2.3	G 3.3.4	No change	-	-
N/A	G 3.3.9	New	Clauses added to reference conformity with RIS-0733-CCS.	3
N/A	G 3.3.10	New	Guidance referencing RIS-3781-TOM should the user need more information on stop marker positioning.	3
3.2.3	3.4.1	Revised – material change	Updated to reference trackside visible objects.	1
G 3.2.3.1	G 3.4.2	Revised – material change	Minimum sighting distance' vice 'required readable distance'. Updated to refer to 'trackside visible objects'.	1
N/A	G 3.4.3	New	Added a conformity rationale, referencing 'visibility', 'readability', 'interpretability' and 'driveability' principles.	1
G 3.2.3.2	G 3.4.4	Revised – material change	Updated to reference trackside visible objects.	1
G 3.2.3.3	G 3.4.5	Revised – material change	Edited for clarity	3
G 3.2.3.4	G 3.4.6	Revised – material change	Tabular reference update to reflect table identifier change	3
G 3.2.3.5	G 3.4.7	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 3.2.3.6	G 3.4.8	Revised – material change	Tabular reference update to reflect table identifier change.	3
3.2.4	2.9.2	Revised – material change	Requirement amended to accommodate ‘readability’ and ‘visibility’.	1
N/A	2.9.1	New	New requirement for confirming visibility against interpretability.	1
G 3.2.4.1	G 2.9.3	Revised – material change	Rationale expanded to better support the requirements.	3
G 3.2.4.2	G 2.9.4	Revised – material change	Rationale expanded to improve the support for the requirement 2.9.2.	3
N/A	G 2.9.5	New	New rationale providing the principles that underpin the requirement.	3
N/A	G 2.9.6	New	New guidance for assessing against visible performance.	1
N/A	G 2.9.7	New	New guidance providing figures from RARA tool.	3
N/A	G 2.9.8	New	New guidance for RARA figures relating to operational signs.	3
G 3.2.4.3	G 2.9.9	Redrafted – no material change	Minor rewording to align with principles and terminology.	3
G 3.2.4.4	G 2.9.10	Redrafted – no material change	Minor rewording to align with new terminology.	3
G 3.2.4.5	G 2.9.11	Redrafted – no material change	Minor amendment to wording for clarity.	3
G 3.2.4.6	G2.9.12	Redrafted – no material change	Minor amendments for clarity and include reference to table 1.	3
3.3 Minimum response time	3.5 Calculating the minimum response time (MRT)	Redrafted – no material change	Section heading amended.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
3.3.1	3.5.1	Revised – material change	Minimum sighting distance' vice 'required readable distance'.	1
N/A	3.5.2	New	New requirement relating to contextual factor B2.	3
N/A	3.5.3	New	New requirement relating to contextual factor B3.	3
G 3.3.1.1	G 3.5.4	Redrafted – no material change	Minor rewording to align with new terminology.	3
N/A	G 3.5.5	New	New rationale supporting contextual factors B2 and B3.	3
N/A	G 3.5.6	New	New rationale to support requirement 3.5.1.	3
N/A	G 3.5.7	New	New rationale to support the principles of the requirements.	3
G 3.3.1.2	G 3.5.8	Revised – material change	Edited for conciseness.	3
G 3.3.1.3	G 3.5.9	Revised – material change	Minimum sighting distance' vice 'required readable distance'. Tabular reference update to reflect table identifier change.	1
G 3.3.1.4	G 3.5.10	No change	-	-
G 3.3.1.5	G 3.5.11	No change	-	-
G 3.3.1.6	G 3.5.12	No change	-	-
3.4 Baseline response time	3.6 Application of 7 seconds baseline response time (BRT)	Redrafted – no material change	Alignment of topics due to numbering change.	3
3.4.1	3.6.1	Revised – material change	Edited for clarity.	3
G 3.4.1.1	G 3.6.2	Revised – material change	Edited for clarity considering 'trackside visible objects' vice solely signals and signs.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 3.6.3	New	Clause added to outline what signalling layout is needed for RIS-0703-CCS compliance.	3
G 3.4.1.1	G 3.6.4	Revised – material change	Edited for conciseness.	3
G 3.4.1.2	G 3.6.5	Revised – material change	Edited for clarity considering 'trackside visible objects' vice solely signals and signs.	3
N/A	G 3.5.6	New	Clause added to affirm alignment with 'driveability' principle.	3
N/A	G 3.5.7	New	Clause added for quantitative value of '7s BRT'.	3
N/A	G 3.5.8	New	New guidance based upon scenarios on requirements set out earlier within 'Part 3'.	3
N/A	G 3.5.9	New	New guidance based upon scenarios on requirements set out earlier within 'Part 3'.	3
G 3.4.1.3	G 3.1.2	Redrafted – no material change	Guidance moved to more relevant section. Minor rewording for clarity.	3
G 3.4.1.4	G 3.1.3	Redrafted – no material change	Guidance moved to more relevant section. Minor rewording for clarity.	3
G 3.4.1.5	G 3.6.10	Redrafted – no material change	Updated to reflect newer standard reference.	3
N/A	3.7 Application of 5 second baseline response time (BRT)	New	Separate topic subheading introduced.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
3.4.2	3.7.1	Revised – material change	Issue 1 requirements 3.4.2, 3.4.3, and their associated rationale and guidance have been revised and are now incorporated into Issue 2 - 3.7.1. Clauses have been revised for clarity, to be more concise or to provide greater context to help with interpretation of the requirement. Clause added to affirm alignment with 'driveability' principle and reference to it.	3
G 3.4.2.1	G 3.7.4	Revised – material change	Issue 1 requirements 3.4.2, 3.4.3, and their associated rationale and guidance have been revised and are now incorporated into Issue 2 - 3.7.1. Clauses have been revised for clarity, to be more concise or to provide greater context to help with interpretation of the requirement. Clause added to affirm alignment with 'driveability' principle and reference to it.	3
G 3.4.2.2	G 3.7.5	Revised – material change	Issue 1 requirements 3.4.2, 3.4.3, and their associated rationale and guidance have been revised and are now incorporated into Issue 2 - 3.7.1. Clauses have been revised for clarity, to be more concise or to provide greater context to help with interpretation of the requirement. Clause added to affirm alignment with 'driveability' principle and reference to it.	3
G 3.4.2.3	G 3.7.9	Revised – material change	Issue 1 requirements 3.4.2, 3.4.3, and their associated rationale and guidance have been revised and are now incorporated into Issue 2 - 3.7.1. Clauses have been revised for clarity, to be more concise or to provide greater context to help with interpretation of the requirement. Clause added to affirm alignment with 'driveability' principle and reference to it.	3
G 3.4.2.4	N/A	Withdrawn	Guidance withdrawn as this is not useful information and could cause confusion.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
3.4.3	3.7.1	Revised – material change	Issue 1 requirements 3.4.2, 3.4.3, and their associated rationale and guidance have been revised and are now incorporated into Issue 2 - 3.7.1. Clauses have been revised for clarity, to be more concise or to provide greater context to help with interpretation of the requirement. Clause added to affirm alignment with 'driveability' principle and reference to it.	3
N/A	G 3.7.2	New	New rationale to support requirement 3.7.1.	3
N/A	G 3.7.3	New	New rationale to support compliance with RIS-0703-CCS for signalling layouts.	3
G 3.4.3.1	G 3.7.6	Revised – material change	Issue 1 requirements 3.4.2, 3.4.3, and their associated rationale and guidance have been revised and are now incorporated into Issue 2 - 3.7.1. Clauses have been revised for clarity, to be more concise or to provide greater context to help with interpretation of the requirement. Clause added to affirm alignment with 'driveability' principle and reference to it.	3
N/A	G 3.7.7	New	New rationale to support the principles underpinning the requirement.	3
G 3.4.3.2	G 3.7.8	Revised – material change	Issue 1 requirements 3.4.2, 3.4.3, and their associated rationale and guidance have been revised and are now incorporated into Issue 2 - 3.7.1. Clauses have been revised for clarity, to be more concise or to provide greater context to help with interpretation of the requirement. Clause added to affirm alignment with 'driveability' principle and reference to it.	3
G 3.4.3.3	G 3.7.12	Revised – material change	Issue 1 requirements 3.4.2, 3.4.3, and their associated rationale and guidance have been revised and are now incorporated into Issue 2 - 3.7.1. Clauses have been revised for clarity, to be more concise or to provide greater context to help with interpretation of the requirement. Clause added to affirm alignment with 'driveability' principle and reference to it.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 3.4.3.4	G 3.7.12	Revised – material change	Issue 1 requirements 3.4.2, 3.4.3, and their associated rationale and guidance have been revised and are now incorporated into Issue 2 - 3.7.1. Clauses have been revised for clarity, to be more concise or to provide greater context to help with interpretation of the requirement. Clause added to affirm alignment with 'driveability' principle and reference to it.	3
N/A	G 3.7.11	New	New guidance providing reference to Section 3.6 for BRT.	3
N/A	G 3.7.13	New	New guidance providing a reference to RIS-0758-CCS for aspects and junction indications.	3
N/A	3.8	Revised – material change	Separate topic subheading introduced.	3
3.4.4	3.8.1	Revised – material change	Updated to include operational signs. Edited for better readability.	3
3.4.5	G 3.8.8	Revised – material change	Revised to incorporate two clauses into one guidance clause.	3
G 3.4.5.1	G 3.8.8	Revised – material change	Revised to incorporate two clauses into one guidance clause.	3
N/A	G 3.8.2	New	Rationale clause added for the requirement to add context.	3
G 3.4.5.2	G 3.8.3	Revised – material change	Edited for conciseness.	3
N/A	G 3.8.4	New	Clause added to affirm alignment with 'driveability' principle and reference to it.	3
G 3.4.5.3	G 3.8.5	Revised – material change	Edited to remove contextual signal example.	3
G 3.4.5.4	N/A	Withdrawn	Guidance clause for banner repeaters not applicable in this section and liable to cause confusion for the user.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 3.4.5.5	G 3.8.6	Revised – material change	Edited for clarity. Referencing out to RIS-0703-CCS for more information.	3
N/A	G 3.8.7	New	Added to reference out to RIS-0758-CCS should the user need more information on conveyed information of different signal types.	3
G 3.4.5.6	G 3.8.9	Revised – material change	Tabular reference update to reflect table identifier change.	3
N/A	G 3.8.10	New	Clause added to reference rule book modules for temporary signage.	3
N/A	G 3.8.11	New	Clause added to reference standard for stop markers.	3
N/A	G 3.8.12	New	Clause added to reference standard for more guidance on lineside operational signs.	1
N/A	3.9	New	Separate topic subheading introduced.	3
3.4.6	3.9.1	Revised – material change	Updated to generalise what type of trackside visible object the requirement is applicable to; specific examples extrapolated out to guidance.	1
G 3.4.6.1	G 3.9.2	Revised – material change	Edited rationale to provide better clarity.	3
G 3.4.6.2	G 3.9.3	No change	-	-
G 3.4.6.3	N/A	Withdrawn	Clause removed due to guidance now being provided.	3
N/A	G 3.9.4	New	New rationale to underpin the principles.	3
N/A	G 3.9.5	New	Guidance added to provide distances covered within 2 seconds at certain speeds.	3
N/A	G 3.9.6	New	Extrapolated from Issue 1 clause 3.4.6.	3
N/A	G 3.9.7	New	Clause added to reference standard for more guidance on lineside operational signs.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
Part 4 Asset Configuration Requirements	Part 4 Trackside visible objects: Configuration requirements	Revised – material change	Chapter heading amended to reflect new terminology.	3
4.1 Introductory guidance	4.1 Guidance on configuration of trackside visible objects	Revised – material change	Chapter heading amended to reflect new terminology.	1
4.1.1	G 4.1.1	Revised – material change	Guidance clause expanded to provide examples.	3
4.1.2	N/A	Withdrawn	Guidance clause removed as not accurate.	3
4.1.3	G 4.1.2	Redrafted – no material change	Guidance reworded to remove ambiguous wording.	3
4.1.4	G 4.1.3	No change	-	-
4.2 Colour light signalling assets	4.2 Position of the most restrictive colour light signal aspect or lit indication	Redrafted – no material change	Heading amended to align with the contents of the section.	3
4.2.1	4.2.1	Redrafted – no material change	Minor rewording for clarity.	3
G 4.2.1.1	G 4.2.2	Revised – material change	Rationale clause simplified for the user.	3
G 4.3.1.2	G 4.2.3	Revised – material change	Rationale reworded and expanded to highlight risk.	3
N/A	G 4.2.5	New	New rationale providing the principles that underpin the requirement.	3
G 4.2.1.3	G 4.2.7	Redrafted – no material change	Guidance clause reworded for clarity and reference updated.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 4.2.1.4	G 4.2.8 G 4.2.9	Revised – material change	Guidance amended to make statement easier to read. List items arranged in order of aspect sequence. Part b) an c) of previous clause separated into separate guidance G 4.2.9.	3
G 4.2.1.5	G 4.2.10	No change	-	-
G 4.2.1.6	G 4.2.4	Withdrawn	Guidance moved to rationale to highlight affected contextual factors.	3
G 4.2.1.7	G 4.2.6	Revised – material change	Guidance revised with reference to example provided. Last sentence incorporated into G 4.2.12.	3
G 4.2.1.8	G 4.2.11	Redrafted – no material change	Guidance on co-acting signals revised and additional cross reference included.	3
G 4.2.1.9	G 4.2.12	Revised – material change	Guidance revised and additional sentence incorporated from G 4.2.6 as this is applicable to location specific constraints.	3
4.2.2 G 4.2.2.1 G 4.2.2.2	N/A	Withdrawn	Requirement and guidance relating to signal heads and backboards withdrawn. This is not needed as a requirement as this will be assessed by the committee and further details for assessing backboards can be found in Part 2 and the contextual factors appendices A and C.	3
4.2.3 G 4.2.3.1 G 4.2.3.2	N/A	Withdrawn	Requirement and guidance for 3 and 4 aspect transitions have been withdrawn. These are not needed as requirements as they will be assessed by the committee on an individual case basis. Further details regarding transitions in provided in RIS-0703-CCS.	3
N/A	4.3 Junction splitting distant signals	New	New topic heading.	3
4.2.4	4.3.1	Redrafted – no material change	Minor rewording for clarification and ease of reading.	3
G 4.2.4.1	G 4.3.2	Revised – material change	Rationale revised to provide a link to the requirement and the supporting requirement to avoid repetition.	3
G 4.2.4.2	G 4.3.3	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 4.3.5	New	New rationale providing the principles that underpin the requirement.	3
G 4.2.4.3	G 4.3.11	Redrafted – no material change	Guidance reworded to include an update to reference document.	3
G 4.2.4.4	G 4.3.4	Redrafted – no material change	Guidance for relevant contextual factors now moved to rationale and amended to include C15 and C17.	3
N/A	G 4.3.6	New	New guidance to explain the aspect in relation to MA.	3
G 4.2.4.5	G 4.3.7	No change	-	-
G 4.2.4.6	G 4.3.8	Redrafted – no material change	Additional Figure reference added to guidance.	3
G 4.2.4.7	G 4.3.9	Redrafted – no material change	Minor rewording to include updated reference.	3
N/A	G 4.3.10	New	New guidance providing a reference to RIS-0758-CCS for splitting distant aspects.	3
N/A	4.4 Position light signals	New	New topic heading.	3
4.2.5	4.4.1	Revised – material change	Requirement revised to provide both conditions as list items.	3
G 4.2.5.1	G 4.4.2	Revised – material change	Rationale amended to include reference to movement authority.	3
G 4.2.5.2	G 4.4.3	Revised – material change	Previous guidance relation to contextual factors now moved to rationale.	3
N/A	G 4.4.4	New	New rationale providing the principles that underpin the requirement.	3
G 4.2.5.3	G 4.4.5	Redrafted – no material change	Guidance reworded to remove the term ‘should’.	3
G 4.2.5.4	G 4.4.6	Redrafted – no material change	Minor change to include Figure reference.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 4.2.5.5	G 4.4.7	Redrafted – no material change	Guidance amended to remove the abbreviation PLS and write in full ‘position light signal’.	3
G 4.2.5.6	G 4.4.8	Redrafted – no material change	Guidance reworded so clause does not start with ‘because’.	3
G 4.2.5.7	G 4.4.9	Redrafted – no material change	Minor rewording and inclusion of Figure reference.	3
G 4.2.5.8	G 4.4.10	Redrafted – no material change	Minor update to align terminology and update document reference.	3
N/A	G 4.4.13	New	New guidance provided on replacing position lights with shunting signals.	3
N/A	4.5 Junction indicators	New	New topic heading.	3
4.2.6	4.5.1	Revised – material change	Requirement amended, list item b) removed as blue pivot lights were not adopted past their trial. List item a) split into two items.	3
G 4.2.6.1	G 4.5.2	No change	-	-
G 4.2.6.2	G 4.5.7	Revised – material change	Previous rationale reworded as guidance and clarified.	3
G 4.2.6.3	G 4.5.3	Revised – material change	Rationale amended to remove reference to blue pivot lights and reworded accordingly.	3
G 4.2.6.4	G 4.5.4	Redrafted – no material change	Guidance reworded to provide rationale for the requirement.	3
N/A	G 4.5.5	New	New rationale providing the principles that underpin the requirement.	3
G 4.2.6.5	G 4.5.6	Redrafted – no material change	Guidance reworded and merged into one clause with previous guidance found in G 4.2.6.6.	3
G 4.2.6.6	G 4.5.6	Redrafted – no material change	Guidance reworded and merged into one clause with previous guidance found in G 4.2.6.5.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 4.2.6.7	G 4.5.8	Redrafted – no material change	Minor amendment to include Figure reference.	3
G 4.2.6.8	G 4.5.9	Revised – material change	Guidance amended to provide clarity on applicable signal head.	3
N/A	G 4.5.10	New	New guidance providing reference to RIS-0703-CCS for aspect sequences.	3
G 4.2.6.9	G 4.5.11	Revised – material change	Guidance reworded and document reference updated.	3
N/A	4.6 Alphanumeric route indicators	New	New topic heading.	3
4.2.7	4.6.1	Revised – material change	Previous requirements split into two list items for clarity.	3
G 4.2.7.1	G 4.6.2	No change	-	-
G 4.2.7.2	G 4.6.3	Redrafted – no material change	Previous guidance now applied as rationale.	3
N/A	G 4.6.4	New	New rationale providing the principles that underpin the requirement.	3
G 4.2.7.3	G 4.6.5	Redrafted – no material change	Minor amendment to include Figure reference.	3
G 4.2.7.4	G 4.6.6	Redrafted – no material change	Guidance reworded so clause does not start with ‘because’.	3
G 4.2.7.5	G 4.6.7	No change	-	-
4.2.8	N/A	Withdrawn	Requirement for independent position lights withdrawn. This requirement regarding read-through is assessed as a contextual factor. The requirement has been converted to guidance and reworded in 4.4.13.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 4.2.8.1	G 4.4.11	Revised – material change	Guidance revised and incorporated into guidance section for independent position lights.	3
G 4.2.8.2	G 4.4.13	Revised – material change	Guidance revised and incorporated into guidance section for independent position lights. Reference updated.	3
N/A	4.7 Semaphore signals	New	New topic heading.	3
4.3.1	4.7.1	Revised – material change	Requirement for semaphore signals simplified.	3
G 4.3.1.1 G 4.3.2.1	G 4.7.3	Revised – material change	Rationale simplified to apply to both types of semaphore system.	3
N/A	G 4.7.4	New	New rationale to support the requirement for a 10% tolerance.	3
G 4.3.1.2	N/A	Withdrawn	This was a ‘No guidance provided’ statement. Now removed.	3
4.3.2	4.7.2	Revised – material change	Requirement simplified and amended for accuracy.	3
G 4.3.2.2	G 4.7.5	Revised – material change	Guidance reworded to provide rationale for the requirement. Contextual factors applicable have been updated.	3
N/A	G 4.7.6	New	New rationale providing the principles that underpin the requirement.	3
G 4.3.2.3	G 4.7.9	Redrafted – no material change	Minor rewording and incorporated into a wider statement.	3
G 4.3.2.4	G 4.7.9	Redrafted – no material change	Guidance incorporated into wider statement in G 4.7.9.	3
G 4.3.2.5	G 4.7.10	Redrafted – no material change	Minor amendment to guidance providing reference to Figures.	3
N/A	4.8 Alphanumeric route indicator with a semaphore signal	New	New topic heading.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
4.3.3	4.8.1	Revised – material change	Requirement merged with 4.3.4 in issue 1 for shunt discs. Requirement reworded to accommodate two list items for each asset.	3
G 4.3.3.1	G 4.8.2	Revised – material change	Rationale merged with G 4.3.4.1 in Issue 1. Minor rewording required to make rationale consistent with two assets.	3
G 4.3.3.2	G 4.8.3	Redrafted – no material change	Minor rewording for consistent terminology.	1
N/A	G 4.8.4	New	New rationale providing the principles that underpin the requirement.	3
G 4.3.3.3	G 4.8.5	Redrafted – no material change	Minor amendment to remove the word ‘should’.	3
G 4.3.3.4	G 4.8.8	No change	-	-
4.3.4	4.8.1	Revised – material change	Requirement merged with 4.3.3 in Issue 1 for semaphores. Requirement reworded to accommodate 2 list items for each asset.	3
G 4.3.4.1	G 4.8.2	Redrafted – no material change	Rationale merged with G 4.3.3.1 in Issue 1. Minor rewording required to make rationale consistent with two assets.	3
G 4.3.4.2	G 4.8.3	Redrafted – no material change	Minor rewording for consistent terminology.	3
G 4.3.4.3	G 4.8.7	Redrafted – no material change	Minor rewording to provide clarity.	3
G 4.3.4.4	G 4.8.6	Redrafted – no material change	Minor rewording to provide clarity.	3
4.4 Co-acting signals and indicators	4.9 Provision of a co-acting signal or indicator	Redrafted – no material change	New subheading to provide ease of navigation through document.	3
4.4.1	4.9.1	Redrafted – no material change	Minor rewording to emphasise the committee agreement.	3
G 4.4.1.1	G 4.9.2	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 4.9.3	New	New rationale providing the contextual factors applicable.	3
N/A	G 4.9.4	New	New rationale providing the principles that underpin the requirement.	3
G 4.4.1.2	G 4.9.5	No change	-	-
G 4.4.1.3	G 4.9.6	Redrafted – no material change	Minor change of the word ‘asset’ for ‘product’ for accuracy.	3
G 4.4.1.4	G 4.9.7	Redrafted – no material change	Amended to clarify ‘associated’ indicator and to align terminology.	3
N/A	4.10 Application of co-acting signals	New	New topic heading.	3
4.4.2	4.10.1	Redrafted – no material change	Minor wording change for clarity.	3
G 4.4.2.1	G 4.10.2	Redrafted – no material change	Minor wording change for clarity.	3
G 4.4.2.2	N/A	Withdrawn	This was a ‘No guidance provided’ statement. Now removed.	3
N/A	G 4.10.3	New	New rationale providing the contextual factors to be considered.	3
N/A	G 4.10.4	New	New rationale providing the principles that underpin the requirement.	3
N/A	G 4.10.5	New	New guidance providing a reference to RIS-0758-CCS for junction splitting signals.	2
N/A	4.11 Co-acting signal readability	New	New topic heading.	3
4.4.3	4.11.1	No change	-	-
G 4.4.3.1	G 4.11.4	No change	-	-
G 4.4.3.2	G4.11.10	Redrafted – no material change	Clarification provided for assets affected to make more concise.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
4.4.4	4.11.2	Redrafted – no material change	Minor rewording and amendment to change the word ‘part’ to ‘element’.	3
G 4.4.4.1	G4.11.5 G 4.11.6	Redrafted – no material change	Previous rationale split into two separate rationale statements. Rewording required to make this adjustment.	3
G 4.4.4.2	N/A	Withdrawn	Guidance clause was ambiguous and did not support the requirement.	3
G 4.4.4.3	G 4.11.11	Revised – material change	Permissiveness of the clause was removed and clause reworded to remove term ‘should’.	3
4.4.5	4.11.3	No change	-	-
G 4.4.5.1	G 4.11.7	Redrafted – no material change	Minor rewording for clarity.	3
N/A	G 4.11.8	New	New rationale providing the contextual factors to be considered.	3
N/A	G 4.11.9	New	New rationale providing the principles that underpin the requirement.	3
G 4.4.5.2	G 4.11.12	Redrafted – no material change	Previous guidance was not easy to interpret, therefore, reworded for clarity.	3
4.5 Banner repeater indicators	4.12 Provision of a repeater indicator	Redrafted – no material change	Topic heading changed to support wider heading changes in this section.	3
4.5.1	4.12.1	Redrafted – no material change	Requirement amended to include the sighting committee in the headline requirement to prevent repetition in the list items. Terminology aligned.	3
N/A	G 4.12.4	New	New rationale providing the contextual factors applicable.	3
N/A	G 4.12.5	New	New rationale providing the principles that underpin the requirement.	3
G 4.5.1.1	G 4.12.6	Redrafted – no material change	Previous rationale moved to guidance. Clause amended.	3
G 4.5.1.2	G 4.12.7	Revised – material change	Guidance clause reworded to incorporate new terminology.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 4.5.1.3	G 4.12.8	Redrafted – no material change	Guidance clause revised to provide clarity on which contextual factors apply and avoid repetition.	3
G 4.5.1.4	G 4.12.9	Redrafted – no material change	Guidance amended to provide additional clarity.	3
G 4.5.1.5	G 4.12.10	Redrafted – no material change	Minor amendments to provide clarity and align terminology.	3
G 4.5.1.6	G 4.12.11	Redrafted – no material change	Guidance amended to provide additional clarity.	3
4.5.2	4.12.2	Revised – material change	Requirement amended to include PRI and BJI indicators along with splitting banners. Wording in the clause simplified for clarity.	2
G 4.5.2.1	G 4.12.3	Redrafted – no material change	Previous guidance reworded as rationale.	3
N/A	G 4.12.12	New	New guidance for repeaters provided on station platforms for dispatch purposes.	3
G 4.5.2.2	G 4.12.13	Redrafted – no material change	Reference to RIS-0703-CCS amended as this was still in development during the last issue.	3
N/A	4.13 Application of 2-state or 3-state repeater	New	New topic heading.	3
4.5.3	4.13.1	Redrafted – no material change	Minor change to align terminology.	3
G 4.5.3.1	G 4.13.5	No change	-	-
G 4.5.3.2	G 4.13.3	Redrafted – no material change	Minor rewording to simplify the clause.	3
N/A	G 4.13.4	New	New rationale providing the principles that underpin the requirement.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 4.5.3.3	G 4.13.6	Redrafted – no material change	Wording simplified for clarity.	3
G 4.5.3.4	G 4.13.7	Redrafted – no material change	Wording simplified for clarity.	3
G 4.5.3.5	G 4.13.8	Revised – material change	Guidance reworded to remove the term ‘should’.	3
G 4.5.3.6	G 4.13.2	Revised – material change	Previous guidance reworded as rationale.	3
G 4.5.3.7 G 4.5.3.8	G 4.3.9	Revised – material change	Previous guidance clauses merged into one guidance statement. Clause reworded and Figure reference included.	3
G 4.5.3.9	G 4.3.10	Revised – material change	Guidance amended to update reference document.	3
N/A	4.14 Location of a repeater	New	New topic heading.	3
4.5.4	4.14.1	Revised – material change	Requirement for banner repeaters not expanded to incorporate PRIs and BJIs.	3
N/A	G 4.14.2	New	New rationale to support the requirement 4.14.1 in relation to the position of indicators.	2
N/A	G 4.14.3	New	New rationale providing the contextual factors applicable.	3
N/A	G 4.14.4	New	New rationale providing the principles that underpin the requirement.	3
G 4.5.4.1	G 4.14.5	Redrafted – no material change	Minor wording change to make applicable to all repeaters.	3
G 4.5.4.2	G 4.14.7	Revised – material change	Guidance amended to include banner junction indicators.	3
G 4.5.4.3	G 4.14.8	Revised – material change	Guidance amended to include banner junction indicators. Terminology also aligned.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 4.5.4.4	G 4.14.9	Redrafted – no material change	Minor rewording to remove the term ‘should’.	3
N/A	4.15 Splitting banner repeater head alignment	New	New topic heading.	3
4.5.5	4.15.1	Redrafted – no material change	Minor amendment to align terminology.	3
G 4.5.5.1	G 4.15.2	No change	-	-
N/A	G 4.15.3	New	New rationale providing the contextual factors applicable.	3
N/A	G 4.15.4	New	New rationale providing the principles that underpin the requirement.	
G 4.5.5.2	G 4.15.5	Redrafted – no material change	Minor wording change to remove ‘more’.	3
G 4.5.5.3	G 4.15.6	Redrafted – no material change	Minor amendment to update reference document.	3
4.6 Indications presented at stop boards	4.16 Lit indications at a stop board	Revised – material change	Topic headings changed to align with section layout.	3
4.6.1	4.16.1	Redrafted – no material change	Requirement amended to simplify wording.	3
G 4.6.1.1	G 4.16.3 G 4.16.5	Redrafted – no material change	Minor wording clarification in relation to the TPWS. Contextual factor reference split into separate clause G 4.16.5.	3
N/A	G 4.16.6	New	New rationale providing the principles that underpin the requirement.	3
G 4.6.1.2	G 4.16.7	Redrafted – no material change	Wording simplified for clarity.	3
4.6.2	4.16.2	Redrafted – no material change	Minor change to clarify the points ‘set’.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G 4.6.2.1	G 4.16.4	Redrafted – no material change	Minor rewording and removal of contextual factor C6 as this is duplicated.	3
G 4.6.2.2	G 4.16.8	Revised – material change	Guidance clause amended to update the reference to RIS-0758-CCS.	3
4.7 Buffer stop lights	4.17 Configuration of buffer stop lights	Redrafted – no material change	Topic heading amended to reflect contents.	3
4.7.1	4.17.1	Redrafted – no material change	Requirement amended to align terminology.	3
N/A	G 4.17.3	New	New rationale to support requirement 4.17.1.	3
N/A	G 4.17.4	New	New rationale to support requirement 4.17.1.	3
N/A	G 4.17.6	New	New rationale providing the contextual factors applicable.	3
N/a	G 4.17.7	New	New rationale providing the principles that underpin the requirement.	3
G 4.7.1.1	G 4.17.8	Redrafted – no material change	Previous rationale reworded and provided as guidance.	3
G 4.7.1.2	G 4.17.9	Redrafted – no material change	Previous rationale reworded and provided as guidance.	3
G 4.7.1.3	N/A	Withdrawn	This is not suitable rationale to support the requirement. Similar rationale is for buffer stop light colour is duplicated in the guidance section, hence is withdrawn.	3
G 4.7.1.4	G 4.17.11	Redrafted – no material change	Guidance clause amended to provide clarity on the effects on sighting.	3
G 4.7.1.5	G 4.17.12	No change	-	-
G 4.7.1.6 G 4.7.1.7	G 4.17.10	Redrafted – no material change	Previous guidance clauses merged into one clause and reworded accordingly.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
4.7.2	4.17.2	No change	-	-
G 4.7.2.1	G 4.17.5	Revised – material change	Rationale expanded to include reference to drivers field of view.	3
N/A	G 4.17.13	New	New guidance clause providing reference to RIS-0758-CCS for further requirements for Buffer Stop lights.	3
G 4.7.2.2	4.17.14	Redrafted – no material change	Guidance amended to update reference document for buffer stop design.	3
4.8 Lineside operational signs Guidance	4.18 Configuration of lineside operational signs	Redrafted – no material change	Amended topic heading.	3
G 4.8.1.1 G 4.8.1.2 G 4.8.1.3	N/A	Withdrawn	Previous guidance provided limited information for the configuration of lineside signs. The guidance provided was specific to the design which had been duplicated from RIS-0733-CCS G 3.4.1.4. This has now been substituted with new relevant guidance.	3
N/A	4.18.1	New	New requirement for the positioning of lineside signs.	3
N/A	G 4.18.2	New	New rationale to support the requirement 4.18.1.	3
N/A	G 4.18.3	New	New rationale providing the contextual factors applicable.	3
N/A	G 4.18.4	New	New rationale providing the principles that underpin the requirement.	3
N/A	G 4.18.5	New	New guidance explaining the scope of the requirement.	3
N/A	G 4.18.6	New	New guidance on the types of lineside signs.	3
N/A	G 4.18.7	New	New guidance on the types of information that can be displayed on lineside operations signs.	3
N/A	G 4.18.8	New	New guidance to highlight how visibility and route knowledge support interpretability.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G 4.18.9	New	New guidance providing an example of how the contribution of colour, shape, and size supports interpretability.	3
N/A	G 4.18.10	New	New guidance for sign combinations and their assessment as a totality of information.	3
N/A	G 4.18.11	New	New guidance on the location of lineside signs that contain written instructions.	3
N/A	G 4.18.12	New	New guidance for illumination and retro-reflectivity.	3
N/A	G 4.18.13	New	New guidance provides references to Appendices A and B for assessing signs.	3
N/A	G 4.18.14	New	New guidance providing reference to RIS-0733-CCS for the design and approvals of signs.	3
N/A	G 4.18.15	New	New guidance for the alignment of lineside operational signs.	3
Appendix A				
Appendix A - Compatibility Factors that Prevent Reliable Reading	Appendix A - Contextual factors that prevent reliable reading	Redrafted – no material change	Edited to use updated terminology.	1
A.1 General	A.1 Assessment of contextual factors A2 to A10	Redrafted – no material change	Subheading revised to better reflect the content within.	3
A.1.1	N/A	Withdrawn	Reference in clause no longer applicable.	3
N/A	G A.1.1	New	New clause to summarise the purpose of Appendix 'A'.	3
N/A	G A.1.2	New	This clause references the clause in the main body of the document to help the user understand the applicability of each contextual factor.	3
N/A	G A.1.3	New	This clause references the requirement in the main body of the document to help the user assess the presence of each contextual factor.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
A.2 Insufficient or excessive product visibility or readability performance	A.2 Insufficient or excessive product performance	Redrafted – no material change	Subheading revised for conciseness.	3
G A.2.1.1	G A.2.8	Revised – material change	Updated to incorporate 'trackside visible objects'. Rationale status has been removed and is now listed within guidance under 'consequence'.	1
G A.2.1.2	G A.2.1	Redrafted – no material change	Edited for clarity.	3
N/A	G A.2.2	New	Clause added for clarity, referencing 'trackside visible objects'.	1
G A.2.1.3	G A.2.3	Redrafted – no material change	Edited for clarity.	3
G A.2.1.4	G A.2.9	Redrafted – no material change	Rewritten as bullet-pointed mitigations and expanded to include more qualifiers under this clause.	3
G A.2.1.5	G A.2.4	Redrafted – no material change	Edited for conciseness.	3
G A.2.1.6	G A.2.6	Revised – material change	Updated to include reference to 'trackside visible objects' along with an example scenario.	1
G A.2.1.3	G A.2.5	Revised – material change	Extrapolated out from G A.2.1.3 to emphasise the clause. Updated to reference 'trackside visible objects' vice solely lineside signals.	1
G A.2.1.7	G A.2.7	Redrafted – no material change	Edited for clarity.	3
A.3 Vertical obscuration occurs during the reading time	A.3 Vertical obscuration during the reading time	Redrafted – no material change	Edited for conciseness.	3
G A.3.1.1	G A.3.5	Redrafted – no material change	Edited clarity. Rationale status has been removed and is now listed within guidance under 'consequence'.	3
N/A	G A.3.1	New	Definition added to describe the contextual factor.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G A.3.2	New	New guidance to explain when this factor is not applicable.	3
G A3.1.2	G A.3.3	Redrafted – no material change	Rephrased as a 'potential impact'.	3
N/A	G A.3.4	New	Reference to where further guidance on assessing obscuration can be found within the document.	3
G A.3.1.3	G A.3.6	Revised – material change	Amalgamated into 'mitigations' G A.3.6. Edited for readability. Updated to include reference to 'trackside visible objects'.	1
G A.3.1.4	G A.3.6	Revised – material change	Amalgamated into 'mitigations' G A.3.6. Edited for readability. Updated to include reference to 'trackside visible objects'.	1
A.4 Featureless approach to a stopping point	A.4 Featureless approach to a stopping point	No change	-	-
G A.4.1.1	G A.4.3	Redrafted – no material change	Edited for conciseness.	3
G A.4.1.2	G A.4.1	Revised – material change	Revised as a 'definition'.	3
G A.4.1.3	G A.4.2	Revised – material change	Edited to incorporate 'trackside visible objects'.	1
G A.4.1.4	G A.4.6	Revised – material change	Edited to incorporate 'trackside visible objects'.	1
G A.4.1.5	G A.4.5	No change	-	-
G A.4.1.6	G A.4.4	No change	-	-
G A.4.1.7	G A.4.8	Revised – material change	Rephrased as 'mitigations ' with extra contextual examples included.	3
N/A	G A.4.7	New	Contextual examples of 'consequence' added.	3
A.5 Reflections and glare	A.5 Reflections and glare	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G A.5.1.1	G A.5.7	Revised – material change	Revised as a 'consequence' of the contextual factor being presented. Edited for conciseness.	3
G A.5.1.2	G A.5.1.1	Revised – material change	Revised as a 'definition' of the contextual factor and expanded for more clarity.	3
G A.5.1.3	G A.5.2	Revised – material change	Amalgamated into 'potential impact'. Revised for readability.	3
G A.5.1.4	G A.5.2	Revised – material change	Amalgamated into 'potential impact'. Revised for readability.	3
G A.5.1.5	G A.5.3	Redrafted – no material change	Edited for conciseness.	3
G A.5.1.6	G A.5.4	Redrafted – no material change	Edited for conciseness. Updated to incorporate 'trackside visible objects'.	1
N/A	G A.5.5	Revised – material change	Extrapolated out from G A5.1.5 as a standalone clause for better readability.	3
N/A	G A.5.6	Revised – material change	Extrapolated out from G A5.1.4 as a standalone clause for better readability.	3
G A.5.1.7	G A.5.8	Redrafted – no material change	Edited for conciseness.	3
A.6 Excessive or insufficient illumination in the environment	A.6 Excessive or insufficient illumination in the environment	No change	-	-
G A.6.1.1	G A.6.1	Revised – material change	Revised as a 'definition' of the contextual factor being presented. Edited for conciseness.	3
G A.6.1.2	G A.6.2	Revised – material change	Revised as a 'potential impact' of the contextual factor being presented. Edited for conciseness. Updated to incorporate 'trackside visible objects'.	1
G A.6.1.3	G A.6.3	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G A.6.1.4	G A.6.4	Revised – material change	Updated to incorporate 'trackside visible objects'.	1
G A.6.1.5	G A.6.5	Redrafted – no material change	Revised for better readability.	3
G A.6.1.6	G A.6.7	Revised – material change	Updated to incorporate 'trackside visible objects'.	1
G A.6.1.7	G A.6.8	Revised – material change	Extrapolated and then amalgamated into two new guidance clauses (G A.6.8 and G A.6.9) for better readability and conciseness.	3
G A.6.1.8	G A.6.9	Revised – material change	Extrapolated and then amalgamated into two new guidance clauses (G A.6.8 and G A.6.9) for better readability and conciseness.	3
G A.6.1.9	G A.6.10	Redrafted – no material change	Revised for better readability.	3
G A.6.1.10	G A.6.11	No change	-	-
G A.6.1.11	G A.6.6	Revised – material change	Edited to provide more context on the related appendix.	3
A.7 Inadequate cab sight lines from moving trains	A.7 Inadequate cab sight line from a moving train	Redrafted – no material change	Minor revision for better readability.	3
G A.7.1.1	G A.7.1	Revised – material change	Revised as a 'definition' of the contextual factor being presented. Edited for conciseness. Updated to incorporate 'trackside visible objects'.	1
G A.7.1.2	G A.7.2	Revised – material change	Updated to incorporate 'trackside visible objects'. Reference to further guidance in Appendix C added.	3
G A.7.1.3	G A.7.3	Revised – material change	Revised as a 'potential impact' of the contextual factor being presented. Edited for conciseness. Updated to incorporate 'trackside visible objects'.	1
G A.7.1.4	G A.7.4	Redrafted – no material change	Revised for better readability.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G A.7.1.5	G A.7.7	Revised – material change	Updated to incorporate 'trackside visible objects'.	1
G A.7.1.6	G A.7.4	Revised – material change	Amalgamated into G A.7.4.	3
G A.7.1.7	G A.7.5	Revised – material change	Updated to include reference to NTSNs as well as GMRT2161.	3
N/A	G A.7.6	New	Consequence added to provide context - missing from Issue 1.	3
A.8 Signalling asset not visible from train stopping position	A.8 Object not visible from train stopping position	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G A.8.1.1	G A.8.1	Revised – material change	Amalgamated into the 'definition' of contextual factor. Updated to include 'trackside visible objects'.	1
G A.8.1.2	G A.8.1	Revised – material change	Amalgamated into the 'definition' of contextual factor. Updated to include 'trackside visible objects'.	1
G A.8.1.3	G A.8.2	Revised – material change	Updated to incorporate 'trackside visible objects'.	1
G A.8.1.4	G A.8.6	Redrafted – no material change	Tabular reference updated in line with current document.	3
G A.8.1.5	G A.8.7	Revised – material change	Updated to include 'trackside visible objects'.	1
G A.8.1.6	G A.8.7	Revised – material change	Amalgamated into the options of mitigation list.	3
N/A	G A.8.4	New	Consequence added to provide context - missing from Issue 1.	3
N/A	G A.8.5	New	Consequence added to provide context - missing from Issue 1.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
A.9 Incompatibility with station duties	A.9 Incompatibility with other duties	Revised – material change	Edited to expand the scope outside of stations.	3
G A.9.1.1	-	Withdrawn	No longer required as guidance for the subsection has been expanded	3
G A.9.1.2	G A.9.2	Revised – material change	Edited to expand the scope outside of stations. Updated to include 'trackside visible objects'.	3
G A.9.1.3	-	Withdrawn	Removed owing to expansion of scope beyond stations.	3
G A.9.1.4	G A.9.4	Revised – material change	Edited to expand the scope outside of stations. Updated to include 'trackside visible objects'.	1
G A.9.1.5	G A.9.5	Revised – material change	Guidance expanded for better understanding.	3
N/A	G A.9.1	New	Definition' of contextual factor added to enhance understanding.	3
N/A	G A.9.3	New	Added clause to reference good practice.	3
A.10 Incompatibility with train headlights	A.10 Incompatibility with train headlights	No change	-	-
G A.10.1.1	G A.10.1	Revised – material change	Amalgamated into one clause for better readability. Rephrased as the 'definition' of the contextual factor.	3
G A.10.1.2	G A.10.1	Revised – material change	Amalgamated into one clause for better readability. Rephrased as the 'definition' of the contextual factor.	3
G A.10.1.3	G A.10.2	Revised – material change	Clause expanded for better readability. Rephrase as a 'potential impact'.	3
G A.10.1.4	G A.10.3	Revised – material change	Updated to incorporate 'trackside visible objects'.	3
G A.10.1.5	G A.10.4	No change	-	-
G A.10.1.6	G A.10.6	Redrafted – no material change	Standard reference updated.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G A.10.5	New	New clause to reference where more information can be found for stop board technical compatibility.	3
N/A	G A.10.7	New	Consequence clause of contextual factor added for better guidance.	3
N/A	G A.10.8	New	Mitigation clause of contextual factor added for better guidance.	3
Appendix B				
Appendix B - Compatibility Factors that Require Supplementary Response Time (SRT)	Appendix B - Contextual factors that require supplementary response time (SRT)	Redrafted – no material change	Edited to use updated terminology.	3
B.1 General	B.1 Assessment of contextual factors that require supplementary response time (SRT)	Revised – material change	Subheading revised to better reflect the content within.	3
B.2 Multiple lineside signalling assets of similar appearance in view	3.3.1.2	Redrafted – no material change	Moved to Part 3 to provide better readability when using the document.	3
B.3 Three or more lineside signalling assets of similar appearance in view	3.3.1.3	Redrafted – no material change	Moved to Part 3 to provide better readability when using the document.	3
G B.3.1.1	N/A	Withdrawn	No longer required as guidance for the subsection has been expanded.	3
G B.3.1.2	G B1.1	Revised – material change	Amalgamated into G B.1.1 as a 'definition' of the contextual factor. Updated to incorporate 'trackside visible objects'.	1
G B.3.1.3	G B1.1	Revised – material change	Amalgamated into G B.1.1 as a 'definition' of the contextual factor. Updated to incorporate 'trackside visible objects'.	1
G B.3.1.4	G B.1.3	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G B.3.1.5	G B.1.5	Redrafted – no material change	Edited for clarity and better readability.	3
G B.3.1.6	G B.1.6	Redrafted – no material change	Edited for clarity and better readability.	3
G B.3.1.7	G B.1.2	Revised – material change	Edited for clarity and better readability. Rephrased as a 'potential impact' clause.	3
G B.3.1.8	G B.1.7	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G B.3.1.9	G B.1.8	Revised – material change	Updated to incorporate 'trackside visible objects'. Amalgamated into G B.1.8.	3
G B.3.1.10	G B.1.13	Redrafted – no material change	Figure reference updated.	3
G B.3.1.11	G B.1.8	Revised – material change	Amalgamated into G B.1.8. Figure number updated.	3
G B.3.1.12	N/A	Withdrawn	Guidance withdrawn as general subsection guidance clauses have been expanded.	3
G B.3.1.13	G.B.1.11	Redrafted – no material change	Revised for better readability.	3
G B.3.1.13	G B.1.12	Revised – material change	Extrapolated out into new clause, G B.1.12 to provide better context.	3
N/A	G B.1.4	New	Clause added to direct the reader to other sections of the document for more information on SRT.	3
N/A	G B.1.9	New	Consequence clause added to better illustrate the importance of the contextual factor referred to in this subsection.	3
N/A	G B.1.10	New	Mitigation clause added for the contextual factor referred to in this subsection.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
Appendix C				
Appendix C - Other Compatibility Factors that may Affect Signal Sighting	Appendix C - Other contextual factors that affect sighting	Redrafted – no material change	Edited to use updated terminology and incorporate trackside visible objects.	1
C.1.1	N/A	Withdrawn	Reference in the clause is no longer applicable.	3
N/A	C.1	Revised – material change	New subsection added to provide general guidance on the contextual factors outlined within Appendix C.	3
C.2	C.2	Revised – material change	Edited to use updated terminology and incorporate trackside visible objects.	1
G C.2.1.1	N/A	Withdrawn	Rationale removed as subsection expanded.	3
G C.2.1.2	G C.2.1	Revised – material change	Rephrased as a 'definition'. Updated to incorporate consideration of trackside visible objects.	1
G C.2.1.3	G C.2.2	Revised – material change	Rephrased as a 'potential impact'. Updated to incorporate consideration of trackside visible objects.	1
G C.2.1.4	G C.2.4	Revised – material change	Amalgamated into one clause for better readability.	3
G C.2.1.5	G C.2.4	Revised – material change	Amalgamated into one clause for better readability.	3
N/A	G C.2.3	New	Mitigation clause added for the contextual factor referred to in this subsection.	3
C.3	C.3	No change	-	-
G C.3.1.1	G C.3.2	Redrafted – no material change	Edited to rephrase 'rationale' as a 'potential impact'. Updated to incorporate trackside visible objects.	1

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G C.3.1.2	G C.3.1	Revised – material change	Edited to rephrase as a 'definition'. Updated to incorporate trackside visible objects.	1
G C.3.1.3	N/A	Withdrawn	Clause no longer required due to expanded guidance within this subsection.	3
G C.3.1.4	G C.3.3	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.3.1.5	G C.3.5	Revised – material change	Edited to rephrase as a 'consequence'. Updated to incorporate 'trackside visible objects'.	1
G C.3.1.6	G C.3.4	Redrafted – no material change	Appendix reference number updated.	3
G C.3.1.7	G C.3.6	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
C.4	C.4	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.4.1.1	G C.4.2	Revised – material change	Edited to rephrase 'rationale' as a 'potential impact'. Updated to incorporate trackside visible objects.	1
G C.4.1.2	G C.4.1	Revised – material change	Edited to rephrase as a 'definition'. Updated to incorporate trackside visible objects.	1
G C.4.1.3	G C.4.2	Revised – material change	Amalgamated into one clause for better readability.	3
G C.4.1.4	G C.4.5	Redrafted – no material change	Edited for better readability.	3
N/A	G C.4.3	New	Consequence of contextual factor added for clarity.	3
N/A	G C.4.4	New	Highlighted mitigation of contextual factor added for better readability.	3
C.5	C.5	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G C.5.1.1	G C.5.2	Revised – material change	Edited to rephrase 'rationale' as a 'potential impact'. Updated to incorporate trackside visible objects.	1
G C.5.1.2	G C.5.1	Revised – material change	Edited to rephrase as a 'definition'. Updated to incorporate trackside visible objects.	1
G C.5.1.3	G C.5.2	Revised – material change	Amalgamated into one clause for better readability.	3
G C.5.1.4	G C.5.3	Redrafted – no material change	Appendix reference number updated.	3
G C.5.1.5	G C.5.5	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
N/A	G C.5.4	New	Consequence of contextual factor added for clarity.	3
C.6	C.6	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.6.1.1	G C.6.2	Revised – material change	Edited to rephrase 'rationale' as a 'potential impact'. Updated to incorporate trackside visible objects.	1
G C.6.1.2	G C.6.1	Revised – material change	Edited to rephrase as a 'definition'. Updated to incorporate trackside visible objects.	1
G C.6.1.3	G C.6.2	Revised – material change	Amalgamated into one clause for better readability.	3
G C.6.1.4	G C.6.4	Revised – material change	Updated to incorporate 'trackside visible objects'. Mitigation guidance expanded.	3
N/A	G C.6.3	Revised – material change	Consequence of contextual factor added for clarity.	3
C.7	C.7	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G C.7.1.1	G C.7.2	Revised – material change	Edited to rephrase 'rationale' as a 'potential impact'. Updated to incorporate trackside visible objects.	1
G C.7.1.2	G C.7.1	Revised – material change	Edited to rephrase as a 'definition'. Updated to incorporate trackside visible objects.	1
G C.7.1.3	N/A	Withdrawn	Clause no longer required due to expanded guidance within this subsection.	3
G C.7.1.4	G C.7.3	Redrafted – no material change	Edited for better readability.	3
G C.7.1.5	G C.7.4	Revised – material change	Updated to incorporate 'trackside visible objects'. Mitigation guidance expanded.	3
G C.7.1.6	G C.7.6	Revised – material change	Rephrased as a 'mitigation' of the contextual factor.	3
N/A	G C.7.5	New	Consequence of contextual factor added for clarity.	3
C.8	C.8	No change	-	-
G C.8.1.1	G C.8.2	Revised – material change	Edited to rephrase 'rationale' as a 'potential impact'. Updated to incorporate trackside visible objects.	1
G C.8.1.2	G C.8.1	Revised – material change	Edited to rephrase as a 'definition'. Updated to incorporate trackside visible objects.	1
G C.8.1.3	G C.8.2	Revised – material change	Amalgamated into one clause for better readability.	3
G C.8.1.4	G C.8.4	No change	-	-
N/A	G C.8.3	New	Consequence of contextual factor added for clarity.	3
C.9	C.9	No change	-	-
G C.9.1.1	G C.9.2	Revised – material change	Edited to rephrase 'rationale' as a 'potential impact'. Updated to incorporate trackside visible objects.	1

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G C.9.1.2	G C.9.1	Revised – material change	Edited to rephrase as a 'definition'. Updated to incorporate trackside visible objects.	3
G C.9.1.3	G C.9.2	Revised – material change	Amalgamated into one clause for better readability.	3
G C.9.1.4	G C.9.3	Redrafted – no material change	Appendix reference number updated.	3
G C.9.1.5	G C.9.5	No change	-	-
N/A	G C.9.4	New	Consequence of contextual factor added for clarity.	3
C.10	C.10	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.10.1.1	G C.10.3	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.10.1.2	G C.10.1	Revised – material change	Edited to rephrase as a 'definition'. Updated to incorporate trackside visible objects.	1
G C.10.1.3	G C.10.2	Revised – material change	Edited to rephrase as a 'potential impact'. Updated to incorporate trackside visible objects.	1
G C.10.1.4	G C.10.4	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.10.1.5	G C.10.7	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.10.1.5	G C.10.6	Revised – material change	Clause extrapolated out to individually emphasise this piece of guidance.	3
G C.10.1.6	G C.10.8	No change	-	-
N/A	G C.10.5	New	Consequence of contextual factor added for clarity.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
C.11	C.11	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.11.1.1	G C.11.4	Revised – material change	Edited to rephrase 'rationale' as a 'potential impact'. Updated to incorporate trackside visible objects.	1
G C.11.1.2	G C.11.1	Revised – material change	Edited to rephrase as a 'definition'. Updated to incorporate trackside visible objects.	1
G C.11.1.3	G C.11.4	Revised – material change	Amalgamated into one clause for better readability.	3
G C.11.1.4	G C.11.5	Revised – material change	Updated to incorporate 'trackside visible objects'.	1
G C.11.1.5	G C.11.6	No change	-	-
G C.11.1.6	G C.11.7	No change	-	-
G C.11.1.7	G C.11.8	Redrafted – no material change	Edited for conciseness.	3
G C.11.1.8	G C.11.9	Redrafted – no material change	Updated figure reference.	3
G C.11.1.9	G C.11.12	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.11.1.10	G C.11.13	Revised – material change	Updated to account for 'visibility' as a term.	3
G C.11.1.11	G C.11.15	No change	-	-
G C.11.1.12	G C.11.16	Redrafted – no material change	Edited for better readability.	3
G C.11.1.13	G C.11.17	Revised – material change	Edited for better readability. Updated terminology.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G C.11.1.14	G C.11.9	Revised – material change	Amalgamated into one clause for better readability.	3
G C.11.1.15	G C.11.18	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.11.1.16	G C.11.19	Redrafted – no material change	Updated terminology.	3
G C.11.1.17	G C.11.20	No change	-	-
G C.11.1.18	G C.11.11	Redrafted – no material change	References in the clause updated.	3
N/A	G C.11.2	New	Guidance clause added to reflect when a sighting assessment is required based on 'readability'.	1
N/A	G C.11.3	New	Guidance clause added to reflect when a sighting assessment is required based on 'visibility'.	1
N/A	G C.11.10	New	Consequence of contextual factor added for clarity.	3
N/A	G C.11.14	New	Guidance clause added to outline ways in which a lineside obstruction could be mitigated against.	3
C.12	C.12	No change	-	-
G C.12.1.1	G C.12.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1
G C.12.1.2	G C.12.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1
G C.12.1.3	G C.12.2	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1
G C.12.1.4	G C.12.2	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G C.12.1.5	G C.12.3	Revised – material change	Amalgamated into one clause for better readability.	3
G C.12.1.6	G C.12.3	Revised – material change	Amalgamated into one clause for better readability.	3
G C.12.1.7	G C.12.3	Revised – material change	Amalgamated into one clause for better readability.	3
G C.12.1.8	G C.12.6	Redrafted – no material change	Edited for conciseness.	3
N/A	G C.12.4	New	Consequence of contextual factor added for clarity.	3
N/A	G C.12.5	New	Mitigation clause of contextual factor added for better guidance.	3
C.13	C.13	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.13.1.1	G C.13.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1
G C..13.1.2	G C.13.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1
G C.13.1.3	G C.13.2	Revised – material change	Edited to rephrase as a 'potential impact'. Updated to incorporate trackside visible objects.	1
G C.13.1.4	G C.13.3	No change	-	-
G C.13.1.5	C.13.4	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.13.1.6	C.13.6	Redrafted – no material change	Updated to include reference to RIS-0758-CCS.	3
N/A	C.13.5	New	Consequence of contextual factor added for clarity.	3
C.14	C.14	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
G C.14.1.1	G C.14.1	No change	-	-
C.15	C.15	No change	-	-
G C.15.1.1	G C.15.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	3
G C.15.1.2	G C.15.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	3
G C.15.1.3	G C.15.2	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.15.1.4	G C.15.3	Revised – material change	Updated to incorporate 'trackside visible objects'. Standard reference updated to RIS-0758-CCS.	1
G C.15.1.5	G C.15.4	Redrafted – no material change	Edited for better readability.	3
G C.15.1.6	G C.15.5	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.15.1.7	G C.15.6	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1
G C.15.1.8	G C.15.6	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1
G C.15.1.9	G C.15.8	Redrafted – no material change	Edited for better readability.	3
N/A	G C.15.7	New	Consequence of contextual factor added for clarity.	3
C.16	C.16	Redrafted – no material change	Edited for better readability.	3
C.16.1.1	G C.16.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1

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From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
C.16.1.2	G C.16.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	3
C.16.1.3	G C.16.2	Redrafted – no material change	Edited to rephrase as a 'potential impact'.	3
C.16.1.4	G C.16.3	Revised – material change	Edited for better readability. Reference to RIS-0775-CCS added if more information is required.	3
C.16.1.5	G C.16.4	Revised – material change	Edited to rephrase as a 'potential impact'.	3
N/A	G C.16.5	New	Mitigation clause of contextual factor added for better guidance.	3
C.17	C.17	No change	-	-
G C.17.1.1	G C.17.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1
G C.17.1.2	G C.17.1	Revised – material change	Amalgamated into one clause for better readability. Updated to incorporate 'trackside visible objects'.	1
G C.17.1.3	G C.17.2	Revised – material change	Edited to rephrase as a 'potential impact'. Updated to incorporate 'trackside visible objects'.	1
G C.17.1.4	G C.17.3	Redrafted – no material change	Updated terminology.	3
G C.17.1.5	G C.17.5	Redrafted – no material change	Edited for better readability.	3
G C.17.1.6	G C.17.6	Redrafted – no material change	Standards references updated.	3
G C.17.1.7	G C.17.7	Redrafted – no material change	Standards references updated.	3
N/A	G C.17.4	New	Consequence of contextual factor added for clarity.	3

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From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
C.18	C.18	No change	-	-
G C.18.1.1	G C.18.3	Redrafted – no material change	Updated to incorporate 'trackside visible objects'.	1
G C.18.1.2	G C.18.1	Revised – material change	Edited to rephrase the 'definition' of the contextual factor.	3
G C.18.1.3	G C.18.2	Revised – material change	Edited to rephrase as a 'potential impact'. Updated to incorporate 'trackside visible objects'.	3
G C.18.1.4	G C.18.5	No change	-	-
N/A	G C.18.4	Revised – material change	Consequence of contextual factor added for clarity.	3
Appendix D				
D.1 General D 1.1	N/A	Withdrawn	The topic heading and guidance are not necessary, as they merely state that the section provides guidance.	3
D.2 Introductory guidance	D.1 Risk acceptance	Revised – material change	Subheading amended to reflect the topic contents.	3
D 2.1	G D.1.1	Redrafted – no material change	Guidance reworded to write CSM-REA out in full prior to abbreviation. Wording clarified in list items.	3
D 2.2	N/A	Withdrawn	Previous guidance referencing Part Two was not relevant to the risk acceptance principle.	3
D 2.3	G D.1.2	Redrafted – no material change	Clarification added to guidance that applying as a code of practice is in 'conjunction with a sighting assessment'.	3
D 2.4 D 2.6	G D.1.3	Redrafted – no material change	Guidance clauses merged into one statement. Minor rewording for clarity and cross reference provided.	3
D 2.5	N/A	Withdrawn	Guidance clause explaining the term 'reference system', this is not required.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
D.3 Guidance on available reference systems	D.2 Use of similar reference systems	Redrafted – no material change	Subheading amended to reflect the topic contents and to highlight that the reference system is to be similar.	3
D 3.1	G D.2.1	Redrafted – no material change	Guidance reworded to avoid repetition, minor amendments for clarity also included.	3
D 3.2	G D.2.2	Redrafted – no material change	Guidance amended for consistent terminology.	3
D 3.3 D 3.4	G D.2.3	Redrafted – no material change	Guidance clauses merged into a single statement. Terminology aligned for consistency throughout.	
N/A	G D.2.4	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
N/A	G D.2.5	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
N/A	G D.2.6	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
N/A	G D.2.7	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
N/A	G D.2.8	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
N/A	G D.2.9	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
N/A	G D.2.10	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
N/A	G D.2.11	New	New guidance clause to introduce the Figure providing asset configuration reference.	2

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G D.2.12	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
N/A	G D.2.13	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
N/A	G D.2.14	New	New guidance clause to introduce the Figure providing asset configuration reference.	2
Figures G7 – G17	Figures 20 -30	Revised – material change	Performance specification data quoted in these figures have now been removed.	3
Appendix E				
Appendix E Guidance on Signal Sighting Assessment and Signal Overrun Risk Assessment	Appendix E Guidance on applying sighting assessment to overrun assessment	Redrafted – no material change	Appendix title amended to align with terminology.	3
E.1 General	E.1 Sighting assessment and overrun risk assessment	Redrafted – no material change	This section previously used multiple subheadings, which are now grouped under a single subheading.	3
E 1.1	N/A	Withdrawn	The topic heading and guidance are not necessary, as they merely state that the section provides guidance.	3
E.2 The relationship between signal sighting and signal overrun risk assessment	N/A	Withdrawn	This section previously used multiple subheadings, which are now grouped under a single subheading.	3
E 2.1 E 2.2	N/A	Withdrawn	Guidance is not relevant to how to apply a sighting assessment to an overrun risk assessment. Information relating to outputs now in G E.1.2 and G E.1.3.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G E.1.2	New	New guidance clause providing a high-level statement on where the outputs of a sighting assessment can be used.	3
N/A	G E.1.3	New	New guidance to provide examples of increased operational risks.	3
E 2.3	G E 1.4	Revised – material change	Guidance redrafted to include reference to RIS-0386-CCS for overrun risk assessment.	3
E 2.4	G E.1.1	Revised – material change	Guidance amended to enhance the details relating to the need for a sighting assessment. List items are now more specific.	3
E 2.5	N/A	Withdrawn	Guidance no longer needed as the wording of the clause it relates to (now G E.1.1) provides more details.	3
E.3 Compatibility factors and the Vari-SPAD questions	N/A	Withdrawn	This section previously used multiple subheadings, which are now grouped under a single subheading.	3
E 3.1	G E.1.5	Redrafted – no material change	Guidance redrafted to provide additional clarity to the clause.	3
E 3.2	N/A	Withdrawn	Guidance is no longer useful. The new guidance provides the relevant information required.	3
Appendix F.				
Appendix F Guidance on Field of Vision	Appendix F Guidance on the human visual system	Redrafted – no material change	Appendix F title amended to better reflect the contents.	3
F.1 General F 1.1	N/A	Withdrawn	The topic heading and guidance are not necessary, as they merely state that the section provides guidance.	3
F.2 Introduction	F.1 Visibility, readability and interpretability	Revised – material change	Topic heading amended to better reflect the contents.	3
F 2.1	G F.1.1	Revised – material change	Introductory guidance expanded and aligned with current terminology.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
N/A	G F.1.2	New	New guidance has been provided to explain the concepts of visibility, readability, and interpretability.	2
N/A	G F.1.3	New	New guidance providing details for 'visibility'.	2
N/A	G F.1.4	New	New guidance providing details on 'readability'.	2
N/A	G F.1.5	New	New guidance providing details on 'interpretability'.	2
F.3 Vision and perception	F.2 Visibility and perception	Redrafted – no material change	Minor wording change to subheading to align with document terminology.	3
F 3.1	G F.2.1	Redrafted – no material change	Minor rewording for alignment with HF principles.	3
F 3.2	G F.2.2	Revised – material change	Minor rewording and removal of reference to vision. Alignment with HF principles.	3
F 3.3	G F.2.3	Revised – material change	Reference text previously incorporated in the Figure is now included in the guidance.	3
F 3.4	G F.2.4	Redrafted – no material change	Figure reference updated.	3
F.4 Introduction	N/A	Withdrawn	Subheading withdrawn as contents incorporated into 'Visibility and perception'.	3
F 4.1	G F.2.5	Revised – material change	Minor rewording to clarify the 'reading' task. Figure 33 (previously Figure G 20) was amended to align HF terminology with sighting assessment terminology.	2
F 4.2	G F.2.6	Revised – material change	Guidance amended to align with HF terminology.	3
F 4.3	G F.2.7	No change	-	-
F 4.4 F 4.5	G F.2.8	Redrafted – no material change	Previous guidance clauses were consolidated into a single statement for consistency. Terminology aligned throughout.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
F.5 Asset visibility	N/A	Withdrawn	Subheading withdrawn as contents incorporated into 'Visibility and perception'.	3
F 5.1	G F.2.9	No change	-	-
F 5.2	G F.2.10	Redrafted – no material change	Minor amendment to provide cross reference to relevant sections.	3
F.6 Field of vision	F.3 Field of vision	No change	-	-
F 6.1	G F.3.1	No change	-	-
F 6.2	G F.3.2	No change	-	-
F 6.3	G F.3.3	No change	-	-
F 6.4 F 6.5	G F.3.4	Redrafted – no material change	Additional statement from F 6.5 added to the end of the guidance relating to the driver's visual search.	3
F 6.6	G F.3.5	Redrafted – no material change	Minor formatting changes made and alignment to terminology.	3
F 6.7	G F.3.6	Redrafted – no material change	Minor amendments to update Figure and Table references. Clarity added to the table values in relation to the direction of the driver's sight taken from F 6.8.	3
N/A	G F.3.7	New	New guidance clause created from text inserted in Figure G 22 (Now Figure 35). Text removed from Figure.	2
F 6.8	G F.3.8	Revised – material change	First statement incorporated into guidance G F.3.6. Minor rewording for clarity.	3
F 6.9	G F.3.9	Redrafted – no material change	Minor rewording for clarity.	3
F 6.10	G F.3.10	Redrafted – no material change	Minor rewording for clarity.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
F 6.11	G F.3.11	Redrafted – no material change	Guidance reworded as a ‘good practice’ statement.	3
F.7 Contrast sensitivity	F.4 Contrast sensitivity	No change	-	-
F 7.1	G F.4.1	No change	-	-
F 7.2	G F.4.2	Redrafted – no material change	Figure reference updated.	3
F 7.3	G F.4.3	Revised – material change	Guidance for object orientation expanded to highlight enhancing contrast.	3
F 7.4	G F.4.4	Redrafted – no material change	Introduction to Figure added to clause.	3
F 7.5	G F.4.5	Revised – material change	Terminology has been updated, and guidance has been expanded to add clarity.	3
F 7.6	G F.4.6	Redrafted – no material change	Guidance redrafted to remove parentheses.	3
F 7.7	G F.4.7	Redrafted – no material change	Guidance redrafted to update Figure and to remove parentheses.	3
F 7.8	G F.4.3	Redrafted – no material change	Previous guidance has been added to the existing guidance in G F.4.3.	3
F.8 Luminance sensitivity	F.5 Luminance sensitivity	No change	-	-
F 8.1	G F.5.1	Redrafted – no material change	Minor amendments to re-phrase the guidance as a statement of fact and to remove parentheses.	3
F 8.2	G F.5.2	No change	-	-
F 8.3	G F.5.3	Redrafted – no material change	Minor amendments to guidance for grammar and consistency.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
F 8.4	N/A	Withdrawn	Guidance clause relating to running LEDs at half power is not appropriate as guidance for this topic, therefore removed.	3
F.9 Light adaptation	F.6 Light adaptation	No change	-	-
F 9.1	G F.6.1	Redrafted – no material change	Guidance redrafted to remove parentheses.	3
N/A	G F.6.2	New	New guidance to introduce the Figure (Figure 39) below it.	3
F 9.2	G F.6.3	Redrafted – no material change	Guidance redrafted to remove parentheses.	3
F.10 Colour vision	F.7 Colour vision	No change	-	-
F 10.1	G F.7.1	No change	-	-
F 10.2	G F.7.2	No change	-	-
F 10.3	G F.7.3	Redrafted – no material change	Minor amendments for clarity and to include Figure reference.	3
F 10.4	G F.7.4	No change	-	-
F 10.5	G F.7.5	No change	-	-
F 10.6	G F.7.6	Redrafted – no material change	Minor change to clarify that it relates to signal aspects.	3
F 10.7	N/A	Withdrawn	Guidance duplicated guidance already included in G.F.7.4.	3
F 10.8	G F.7.7	No change	-	-
F 10.9	G F.7.8	No change	-	-
F 10.10	G F.7.9	Redrafted – no material change	Guidance reworded to present as a good practice statement.	3
F.11 Afterimages	F.8 After-images	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
F 11.1	G F.8.1	Revised – material change	Guidance amended to incorporate the text within Figure 41 (previously, the Figure had no ID).	3
F 11.2	G F.8.2	No change	-	-
F 11.3	G F.8.3	No change	-	-
F 11.4	G F.8.4	Redrafted – no material change	Minor wording change to remove permissiveness.	3
F.12 Visual acuity	F.9 Visual acuity	No change	-	-
F 12.1	G F.9.1	Redrafted – no material change	Guidance amended to remove parentheses and the term ‘spatial resolution’.	3
F 12.2	G F.9.2 G F.9.3 G F.9.4	Revised – material change	Guidance revised and content split into separate guidance clauses relating to visual acuity and spatial resolution. Wording revised to support standalone clauses.	3
F 12.3	G F.9.5	Redrafted – no material change	Minor amendments to wording to remove parentheses.	3
F 12.4	G F.9.6 G F.9.7	Revised – material change	Guidance revised and content split into separate guidance clauses relating to visual acuity and spatial resolution. Wording revised to support standalone clauses.	3
F 12.5	G F.9.8	Redrafted – no material change	Guidance redrafted to remove the term ‘should’.	3
F.13 Visual accommodation	F.10 Visual accommodation	No change	-	-
F 13.1	G F.10.1	Redrafted – no material change	Guidance amended to include the ‘human’ eye.	3
F 13.2	G F.10.2	No change	-	-

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
F 13.3	G F.10.3	Redrafted – no material change	Reworded to provide additional clarity.	3
F 13.4	G F.10.4	Redrafted – no material change	Minor amendments to guidance for additional clarity.	3
F.14 Perception of signals	F.11 Perception of visual stimuli	Redrafted – no material change	Topic heading amended to reflect contents, which now incorporate additional sections.	3
F 14.1	G F.11.1	Redrafted – no material change	Minor amendment to include ‘their’.	3
F 14.2	G F.11.2	No change	-	-
F 14.3	G F.11.3	Redrafted – no material change	Previous quoted sections now replaced with ‘the sections below’.	3
F.15 Distance perception and size constancy	N/A	Withdrawn	Section incorporated into topic heading F 11. Guidance heading provided.	3
F 15.1	G F.11.4	No change	-	-
F 15.2	G F.11.5	No change	-	-
F 15.3	G F.11.6	No change	-	-
F 15.4	G F.11.7	No change	-	-
F 15.5	G F.11.8	No change	-	-
N/A	G F.11.9	New	New guidance clause to introduce and explain Figure 42. Text incorporated in the Figure previously (Figure G 28) is now included in this clause.	3
F 15.6	G F.11.10	Redrafted – no material change	Guidance reworded to provide technical clarity.	3
F 15.7	G F.11.11	Redrafted – no material change	Minor amendments to align terminology.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
F 15.8	G F.11.12	No change	-	-
F 15.9	G F.11.13	Redrafted – no material change	Guidance reworded to align terminology.	3
F 15.10	G F.11.14	Redrafted – no material change	Guidance clause reworded to remove the term ‘should’.	3
F 15.11	G F.11.15	Redrafted – no material change	Guidance reworded to align terminology.	3
F 15.12	G F.11.16	Redrafted – no material change	Guidance reworded as a good practice statement.	3
F 15.13	G F.11.17	Redrafted – no material change	Guidance amended to remove the permissiveness of the clause.	3
F.16 Motion parallax	N/A	Withdrawn	Section incorporated into topic heading F 11. Guidance heading provided.	3
F 16.1	G F.11.18	No change	-	-
F 16.2	G F.11.19	No change	-	-
F 16.3	G F.11.20	Redrafted – no material change	Guidance reworded as a good practice statement.	3
F.17 Pattern matching	N/A	Withdrawn	Section incorporated into topic heading F 11. Guidance heading provided.	3
F 17.1	G F.11.21	Redrafted – no material change	Guidance redrafted to remove the term ‘should’.	3
F 17.2	G F.11.22	Redrafted – no material change	Minor amendment to the clause to align terminology.	3
F 17.3	G F.11.23	Redrafted – no material change	Guidance clause simplified by introducing two list items to provide clarity to users.	3
N/A	G F.11.24	New	New guidance clause for ‘line identity’ signs in areas with multiple lines.	1

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
F 17.4	G F.11.25	Redrafted – no material change	Guidance amended to remove reference to ‘research’. Staggering signals is now a practice and no longer research.	3
Appendix H				
H.1 General	H.1 Cab vision plots	Redrafted – no material change	Topic heading amended to reflect contents.	3
H 1.1	N/A	Withdrawn	Previous guidance clause stating that the section was for ‘guidance’ was not useful.	3
H.2 Introduction	N/A	Withdrawn	Subheading not required as general heading applies to complete section.	3
H 2.1	G H 1.1	Redrafted – no material change	Minor rewording to align terminology and add clarity to guidance.	3
H 2.2	G H 1.2	Redrafted – no material change	Amended to remove the term ‘should’.	3
H 2.3	G H 1.3	Redrafted – no material change	Minor rewording to align terminology.	3
H 2.4	G H 1.4	Redrafted – no material change	Minor rewording to align terminology and remove permissive wording.	3
H 2.5	G H 1.5	Redrafted – no material change	Guidance clause redrafted for clarity and remove the term ‘should’.	3
H 2.6	G H 1.6	No change	-	-
N/A	G H 1.7	New	New guidance providing a reference to the LOC&PAS NTSN for cab design.	3
H.3 Asset specific cab vision plot	N/A	Withdrawn	Subheading not required as general heading applies to complete section.	3

Business case for change

From RIS-0737-CCS Issue 1	To RIS-0737-CCS Issue 2	Way forward	Comments	Objective
H 3.1 H 3.2	G H 1.8	Redrafted – no material change	Minor rewording to align terminology and additional information provided for ‘output data’ previously includes in H 3.2 now merged into this statement.	3
H.4 Generic cab vision plot	N/A	Withdrawn	Subheading not required as general heading applies to complete section.	3
H 4.1 H 4.2 H 4.3	G H 1.9	Redrafted – no material change	Previous guidance clauses combined into one clause and terminology relating to ‘objects’ aligned with document.	3
H.5 Further research	N/A	Withdrawn	Subheading not required as general heading applies to complete section.	3
H 5.1 H 5.2	N/A	Withdrawn	Previous guidance relating to platform stop markers now withdrawn as they are not covered by this standard.	3

Appendix B Disposition table RIS-0733-CCS

Table B1: RIS-0733-CCS Issue 1.4 to RIS-0733-CCS Issue 1.5

Clauses not listed below have not been changed.

From RIS-0733-CCS Issue 1.4	To RIS-0733-CCS Issue 1.5	Way forward	Comments	Objective
G 2.2.4	G 2.2.4	Revised – material change	Guidance clause for assessment of lineside operational signs and terminology for the assessment updated to align with the scope of RIS-0737-CCS Issue 2.	3
G 2.2.5	G 2.2.5	Revised – material change	Guidance clause for assessment of lineside operational signs and terminology for the assessment updated to align with the scope of RIS-0737-CCS Issue 2.	3
G 3.5.5	G 3.5.5	Redrafted – no material change	Terminology for the sighting assessment updated to align with the terminology of RIS-0737-CCS Issue 2.	3