

Lead standards committee:	Control Command & Signalling - CCS	Date:	
Support standards committee:	Traffic Operation and Management – TOM	Date:	
	Plant - PLT	Date:	
Subject:	60-month review of RIS-0212-CCS issue 1, <i>Signalling Lockout Systems to Protect Railway Undertaking Personnel</i> .		
Sponsor:	Ged Neacy, Professional Head of Control Command & Communication.		
Author:	Richard Barrow, Principal Control Command & Communication Engineer.		

1. Purpose of the paper

- 1.1 This paper sets out the outcome of the 60-month review of RIS-0212-CCS issue 1, *Signalling Lockout Systems to Protect Railway Undertaking Personnel*. Standards committee(s) approval and support is sought for the recommendation and way forward.

2. Background

- 2.1 A signalling lockout system is defined as a type of protection system that is interlocked with the signalling system to ensure that movement authorities cannot be issued into the defined protection area when the protection is being used.
- 2.2 Signalling lockout systems are provided and managed by an infrastructure manager (IM) and used as a means of setting up a safe system of work before authorised users start work on or about the line. At some locations a signalling lockout system is provided by an IM for use by railway undertaking (RU) personnel.
- 2.3 RIS-0212-CCS issue one was published in September 2018 as one of the outputs of the Industry Strategy for Standards 2016-2019. The strategy stated that RSSB would undertake a review of all existing railway group standards, to confirm that they contain only requirements classified as national rules.
- 2.4 Following a review of the requirements within GKRT0212 issue one it was deemed that they did not meet the criteria for national rules, but there were still elements of the documents such as requirements outlining the Railway Undertakings - Infrastructure Manager interface that were still relevant.
- 2.5 The content of RIS-0212-CCS comprises Part 1 Introduction and two Annexes:
- 2.6 Annex A reproduces in full the content of standard GKRT0212 issue one *Signalling Lockout Systems to Protect Railway Undertaking Personnel*, which was published in August 2007 and withdrawn when RIS-0212-CCS issue one was published.
- 2.7 Annex B reproduces in full the content of guidance note GKG0612 issue one *Guidance on Signalling Lockout Systems to Protect Railway Undertaking Personnel*, which was also published in August 2007 and withdrawn when RIS-0212-CCS issue one was published.

- 2.8 When the decision was taken to retain the existing content and republish the content in a rail industry standard, CCS standards committee acknowledged that the requirements and guidance were technology specific, describing a key release lockout system. At that time, Network Rail was developing alternative trackworker protection solutions, however these were not configured to be used by RU personnel.
- 2.9 There remain locations where RU personnel might need to access the outside of a train on or adjacent to a running line, where provision of a signalling lockout system would realise a suitable method of protection.
- 2.10 The standard is aimed at IM and RU personnel who specify or configure signalling lockout systems that are intended to be used by RU personnel. However, RSSB does not have information about the application of RIS-0212-CCS issue one, or its usefulness.

3. Impacts on the standard(s) following publication/entering into force

- 3.1 Consideration has been given to the following during the review:

- a Business case for change – The case for change provided with RIS-0212-CCS issue one describes two objectives:
- b Align GKRT0212 issue one with the current regulatory framework
- c Retain the information within GKRT0212 in the Standards Catalogue

Both objectives were realised when RIS-0212-CCS was published in 2018.

- d Deviations – Rail industry standards are not subject to the deviation process set out in the Railway Group Standards Code. In 2019 Network Rail approved two deviations against requirements in RIS-0212-CCS as part of the East Midlands signalling scheme. It is not known whether the lockout systems were intended to be used to protect RU personnel.
- e Current projects or proposals being processed – There are no current proposals or standards projects being processed that affect the content of RIS-0212-CCS.
- f Amendments and clarifications – No amendments or clarifications relevant to the content in RIS-0212-CCS have been issued.
- g Enquiries – A search of the RSSB customer enquiry system has not identified any results relevant to signalling lockout systems or RIS-0212-CCS.
- h Research projects – No RSSB led research specific to signalling lockout systems is underway.
- i Regulations – The protection of personnel who are required to work on or about the line is subject to the provisions in the Health and Safety at Work (etc) Act 1974. RIS-0212-CCS is available when applying risk acceptance principles to trackworker safety.
- j National technical specification notices (NTSNs) and European standards – Signalling lockout systems are not covered by the CCS NTSN or OPE NTSN.

- k Changes in technology – The requirements set out in RIS-0212-CCS reflect a signalling lockout system that implements a physical key release and handover based on electro-mechanical technology. Whilst such systems may remain in use, RSSB understands that modern operationally equivalent lockout systems could be realised using alternative technology.
- l Are there any barriers to adoption? – RIS-0212-CCS issue one describes a legacy design that has been implemented on the mainline network. It remains available as a reference system to inform more modern designs.
- m Any other observations?
- n Whilst there are several locations where the IM provides a lockout system for use by RU personnel, their application is not thought to be widespread. Where additional systems are provided, the application of an alternative design solution might be beneficial.
- o Consultation on the 60-month review yielded no comments. Support for the recommendations was received from two consultees.

4. Discussion

4.1 Review outcome

- 4.1.1 When RIS-0212-CCS was published in 2018, Standards Committees recognised that the requirements and guidance were technology specific, however at the time it was decided that updating the standard was a low priority considering the resources available to do standards work.
- 4.1.2 At the 12-month review of RIS-0212-CCS issue one, it was discussed that Network Rail could submit a proposal to update the standard to reflect the outcome of work being done to develop new technology solutions for trackworker protection. No such proposal has been submitted.
- 4.1.3 The principles relevant to the protection of trackworkers are similar to the principles for block systems, in as much as risk control measures are established to manage the protection of a given party to access a predetermined section of line, involving the transfer of an authority between the signaller and the party needing the protection.
- 4.1.4 RSSB Standards Project 20-016 was established to standardise the fundamental principles for block systems. Project stage one developed a block system model and system definition, to inform the development of requirements at project stage two, however this was not taken forward and 20-016 was put on hold awaiting resource availability.
- 4.1.5 This definition could be used to inform the development of a set of requirements for systems that incorporate handover-hand back arrangements between a signaller and RU personnel; for example, a signalling lockout system or a ground frame.
- 4.1.6 It is proposed that the requirements for systems that incorporate handover-hand back arrangements between a signaller and RU personnel should be included as part of the scope of Project 20-016. RIS-0212-CCS issue one would be withdrawn when replacement content is published in the new standard on block systems.

5. Recommendations

- 5.1 The [standard committees](#) will be asked to:

- a DISCUSS the outcome of the [five-year](#) review, the consultation comments and draft responses and the proposed recommendation to include the revision of RIS-0212-CCS as part of the scope of standards project 20-016 Block Systems

- b APPROVE/SUPPORT as appropriate:

[The lead standards committee to approve the recommendation, the draft responses to consultation and the next review date.](#)

[The support standards committee\(s\) to support the recommendation. \[technical specialist to establish with the Chair of the support committee if their committee wish to review and support the draft responses to consultation\].](#)

- c APPROVE conclusion of the review process.

[The lead standards committee to approve the review process is concluded.](#)

RSSB completion: [\[do not delete\]](#)

Standards committee	Meeting date	Decision	Minute numbers		Next review date approved by the lead standards committee
			Pre-consultation review	Post-consultation review	
Rolling Stock		Approved			
Plant		Supported			

[\[add rows as necessary\]](#)

Appendix A Disposition table for standard(s) recommended for withdrawal

A.1 Standard number, title, issue [\[one table per standard\]](#)

Clause number	Clause title	Way forward	Comments
		Withdraw	Why the clause is no longer needed

Appendix B Associated information to support the review

The information in this appendix is provided by the industry groups information manager to assist with the review. This appendix should be deleted prior to submitting the review form to the SCs.

Deviations	None
Request for Help	21-REQ-007 (submitted by Richard Barrow and Ged Neacy)
Proposals	None
Amendments or clarifications	None
Point releases	None
Technical notes	None
Enquiries	Please check – enquiry desk down
Impact Assessment.	https://www.rssb.co.uk/-/media/Project/RSSB/RssbWebsite/Documents/Registered/Impact-Assessments/2020/09/16/10/24/18-IA22.pdf
CIRAS	Information/data held by CIRAS relating to staff or passengers that could be relevant to the document
Information from RMDB Note: update RMDB to reflect action/decision	None
Other intelligence and relevant information	Any sources of supporting information, if anecdotal this should be clear, or referenced appropriately if not

Related documents:

Process procedure for the 12 month and five-year review of Railway Group Standards and other documents