24-017 Consolidating Rule Book requirements for protecting staff

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

Version:	1.2		
Purpose:	Approval to proceed to consultation		
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Lead industry committee:	Traffic Operation and Management Standards Committee (TOM SC)	**Date:**	21 April 2026
Supporting industry committee:	Control, Command and Signalling Standards Committee (CCS SC)	**Date:**	07 May 2026
Supporting industry committee	Rolling Stock Standards Committee (RST SC)	**Date:**	30 April 2026
Supporting industry committee:	Plant Standards Committee (PLT SC)	**Date:**	By correspondence

Decision

TOM SC is asked to:

- **APPROVE** that the proposed revisions to the Rule Book modules and handbooks below are consulted on.
  In approving the Rule Book modules and handbooks for consultation, the SC has:
  - DECIDED that the proposed revisions deliver the intentions of the proposals for change.
  - DECIDED that the proposed revisions are in a suitable state for consultation.
- **IDENTIFY** any specific organisations or individuals to be included in the consultation.

CCS SC, RST SC and PLT SC are asked to**:**

- **SUPPORT** that the proposed revisions to the Rule Book modules and handbooks are consulted on.
  In supporting the Rule Book modules and handbooks for consultation, the SC has:
  - SUPPORTED that the proposed revisions deliver the intentions of the proposals for change.
  - SUPPORTED that the proposed revisions are in a suitable state for consultation.
- **CONSIDER** whether they need any further involvement in the project beyond the pre-consultation stage. (NB they would still be involved in formal consultation)

24-017 Consolidating Rule Book requirements for protecting staff

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 revised documents

Number	Title	Issue
GERT8000-T3	Possession of a running line for engineering work	14
GERT8000-HB9	IWA or COSS setting up safe systems of work within possessions	10
GERT8000-HB11	Duties of the person in charge of the possession (PICOP)	12
GERT8000-HB12	Duties of the engineering supervisor (ES) in a possession	12

Proposed superseded documents

Number	Title	Issue
GERT8000-T3	Possession of a running line for engineering work	13
GERT8000-HB9	IWA or COSS setting up safe systems of work within possessions	9
GERT8000-HB11	Duties of the person in charge of the possession (PICOP)	11
GERT8000-HB12	Duties of the engineering supervisor (ES) in a possession	11

Summary

Background and change

As part of its response to Rail Accident Investigation Branch (RAIB) recommendations following a near miss with two track workers near Camden Junction South in 2017, Network Rail has been trialling alternatives to detonators as possession limit controls. This has been under the authority of deviations granted by the Traffic Operation and Management Standards Committee (TOM SC), the current deviation being 25-021-DEV approved on 7 October 2025. Network Rail submitted a Request for Help (RfH) (25-REQ-060) to incorporate these arrangements into the Rule Book. This RfH also requests incorporation into the Rule Book of transient work sites, which have been trialled under the authority of deviations and 'virtual' work site briefings.

A request for help RfH (25-REQ-077) proposes changes to align the procedures with operations on a European Rail Traffic Management System (ERTMS) line.

It is proposed to progress these changes above as a first phase of the project with the changes affecting possessions being published to come into effect in December 2026.

A previous request for help (24-REQ-026) from Network Rail pointed out that progressive amendments to regulation 13 of GERT8000-TS1 (General signalling regulations), including further methods of additional protection had resulted in a structure described as 'disjointed' and 'not logical'. There is also some confusion over terminology. The introduction of alternative possession limit controls was considered to offer the opportunity of some synergy by combining all the methods of protecting people at work on or near the line into a single module. It is proposed that this be progressed as a second phase of this project with changes coming into force in December 2027.

By progressing in two phases there is an opportunity of considering a further initiative which might change the present distinction between line blockages and possessions. Introduction in two stages is also seen as a means of avoiding an excessive volume of change being introduced at the same time.

Industry impact due to changes

Impact areas	Scale of impact	Estimated value
A. Legal compliance and assurance	Low	£35,000
B. Health, safety and security	Medium	£350,000
C. Reliability and operational performance	High	£41,762,000
D. Design and maintenance	Low	Not proportionate to quantify
E. People, process and systems	Low	Not proportionate to quantify
F. Environment and social value	N/A	-
G. Customer experience and industry reputation	Low	Not proportionate to quantify
Total value of industry opportunity =		**£42,147,000**

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

Detail

1. What are the objectives associated with this change?

Objective 1 – To allow the use of alternative engineering controls to define possession limits as an alternative to detonators.

1.1 The introduction of alternative engineering possession limit controls would assist in taking forward the findings of RSSB research project T1155 (Reviewing the risks and benefits of detonator usage) which suggested that alternatives to their use in relation to possessions could exist.

1.2 The trials of alternative possession limit controls have involved the use of the following methods:

a) Disconnection of signalling equipment by a control centre technician.
b) Remotely activated track circuit operating devices.
c) Remote disconnection of signalling equipment.
d) Route restrictions imposed by signalling control systems.

1.3 Other methods are potentially available, but it is intended that GERT8000-T3 would refer generically to 'engineering controls' rather than describing each method separately. It would however be necessary to publish the conditions for applying and removing individual methods of control.

Objective 2 – To allow the use of transient work sites as a method of protecting track workers on or near the line within a possession.

1.4 The drive to reduce unassisted lookout working following the fatalities at Margam in 2019 and Surbiton in 2021 led to issues when work was required to be carried out between any two work sites, as when this is done with the PICOP's permission, lookouts are used. As a result, Network Rail was granted a deviation (23-021-DEV) applying to the Southern Region but extended in 2024 to apply to the whole of Network Rail. This allowed the portion of line between two work sites to be treated as what was referred to as 'work site X' but is now known as a 'transient work site'. An engineering supervisor (ES) is appointed who can 'sign in' a maximum of 10 controllers of site safety (COSSs) (15 when there is no planned movement of engineering trains or on-track machines) to undertake patrolling, inspecting and examining duties, or to erect or remove emergency or temporary speed restriction equipment. A further deviation (24-039-DEV) was granted to Network Rail Southern Region to extend this arrangement to the portions of line between detonator protection and the extreme work-site marker boards. It is proposed that working between the possession limits and the extreme work-site marker boards is included in the Rule Book, but only in a possession without engineering controls. This could not be applied to a possession with engineering controls.

Objective 3 – To allow work site briefings to be given by an engineering supervisor remotely.

1.5 A deviation (25-016-DEV) was granted to Network Rail against the requirements to receive a work site briefing and sign the ES's Work-site certificate 'face-to-face' as both can be achieved remotely. This can avoid a loss of productive time and risks associated with road journeys but still achieves the essential requirements of creating a clear understanding and documenting the staff under the ES's protection.

Objective 4 – To consider alignment of the possession arrangements within the Rule Book with the requirements on an ERTMS line.

1.6 A request for help was submitted following a review of GERT8000-T3 by the Future Rules and Standards Strategy Group (FR&SSG) proposing that several changes are necessary to align the procedures with operations on a European Rail Traffic Management System (ERTMS) line, particularly where there are no lineside signals.

1.7 Initial consideration of the need to align the Rule Book with its application on ERTMS lines suggests that only minor changes in terminology would be necessary. Ideally it would prove possible to preclude the use of the very old technology of detonator protection on lines with the most up-to-date methods of signalling. On an ERTMS line some of the alternative possession limit controls would be available.

Objective 5 – To consolidate the published arrangements for protecting people working on or near the line.

1.8 A request for help (24-REQ-026) from Network Rail pointed out that regulation 13 of GERT8000-TS1 (General signalling regulations) has been amended several times since it was first published in 2010. Further instructions concerning methods of additional protection for line blockages have been added to regulation 13.2, and various changes made to the arrangements concerning personnel asking for trains to be stopped in regulation 13.1. There is also some confusion over the terms 'protecting signal' and other signals referred to. Since the fatalities at Margam in 2019, the move towards conducting more work within line blockages had been accompanied by an increased number of line blockage irregularities. The structure of the regulation was described as 'disjointed' and 'not logical'. The introduction of alternative possession limit controls was considered to offer the opportunity of some synergy by combining all the methods of protecting people at work on or near the line into a single module.

1.9 The progressive introduction of further methods of additional protection for line blockages and the proposed introduction to the Rule Book of engineering possession limit controls would potentially result in a more complex presentation and an element of duplication, certainly so far as signallers are concerned. It is proposed that the exact medium of publication is not considered until phase 2 of this project.

1.10 A continuing workstream within Network Rail may lead to reconsideration of the boundary between line blockages and possessions.

2. How does the content in the standard need to change to achieve the objective?

Objective 1 – To allow the use of alternative engineering controls to define possession limits as an alternative to detonators.

2.1 Changes are proposed to GERT8000-T3, GERT8000-HB11 and GERT8000-HB12 to show the arrangements for a possession with engineering controls where these differ from the existing instructions which are now proposed to be shown as applying to a possession without engineering controls. Where the same instructions would apply to both protection procedures, they are generally left unchanged.

Objective 2 – To allow the use of transient work sites as a method of protecting track workers on or near the line within a possession.

2.2 It is proposed to make changes to GERT8000-HB11, GERT8000-HB12 and GERT8000-HB9 to allow for transient work sites, which are shown as the only method of carrying out work outside a 'normal' work site,

Objective 3 – To allow work site briefings to be given by an engineering supervisor remotely.

2.3 Changes are proposed to GERT8000-HB9 and GERT8000-HB12 to remove the requirement for a signature on the RT3199 certificate.

Objective 4 – To consider alignment of the possession arrangements within the Rule Book with the requirements on an ERTMS line.

2.4 Some of the protection methods permitted for a possession with engineering controls would be practicable on an ERTMS line, and as a result the references to closing the route as well as keeping a protecting signal at danger, would allow the procedures for a possession with engineering controls to be applied. The instructions for a possession without engineering controls are already worded to allow their application.

Objective 5 – To consolidate the published arrangements for protecting people working on or near the line.

2.5 It is proposed to identify the necessary changes to the Rule book as part of phase 2 of the project.

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

3.1 There is a strong desire within Network Rail to gain the advantages from adoption of the changes under objectives 1 to 4 by incorporating these in the Rule Book. The deviations have an expiry date of 31st December 2026 based on the ability to publish the changes to come into force in December 2026.

3.2 It is expected at present that objective 5 will be completed by publishing changes to come into force in December 2027.

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

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

[The benefits included below are those attributable to completion of phase 1 (objectives 1 to 4). Further benefits attributable to Objective 5 will be calculated at a later date when the scope and impact of that objective are more clearly understood.]

A. Legal compliance and assurance

4.1 Under regulation 7 of the Railway Safety (Miscellaneous Provisions) Regulations 1997, a person in control of the infrastructure of a transport system has a specific legal duty to ensure that procedures are in place to prevent, as far as is reasonably practical, a person at work on that transport system being struck by, or falling from, a moving vehicle. This responsibility is shared with the operator of the vehicle and with the employer(s) of the people at work on a transport system (including self-employed people). Furthermore, the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended) (ROGS) requires that the safety management system of transport operators 'ensures the control' of risk categories related to their operation, including the reduction of risk posed to the safety of their employees and contractors. ROGS also requires that the safety management system demonstrates continuous improvement in risks incurred by their operation.

4.2 Engineering activity is undertaken in a potentially high-risk environment, with exposure to both trackside and road vehicle risk. The changes to the Rule Book proposed by Objectives 1 to 4 establish alternatives to the use of detonators that reduce the risk posed to workers on the GB mainline railway by moving trains. Research project T1155 found that alternative measures are safer than the use of detonators, and therefore the use of detonators should be phased out on the GB mainline railway. The use of alternative secondary control measures by Network Rail under a number of deviations from the Rule Book has similarly demonstrated a reduction in risk using these methods compared to the use of detonators. The changes proposed to be considered under objective 5 would be ones that seek to consolidate and clarify the use of processes for the protection of persons working on lines, thereby reducing the risk posed by the improper implementation of these processes caused by identified ambiguities.

4.3 The proposed Rule Book changes to phase out the use of detonators, and promote the use of alternative secondary control measures (Objectives 1 to 4), and to consolidate and clarify the processes for the protection of persons working on lines (Objective 5) assists infrastructure managers to fulfil their legal duties under the Railway Safety (Miscellaneous Provisions) Regulations 1997 and ROGS to reduce the risk posed to their employees and contractors by engineering work on railway lines. Furthermore, as the Rule Book is used as a code of practice within GB mainline operators' safety management systems, changes to the Rule Book that seek to reduce the risk posed by their operations demonstrate the continuous improvement of operators' safety management systems as required by ROGS.

4.4 If a serious personal injury is caused to an employee or contractor of an infrastructure manager, and this is attributed to a failure of the infrastructure manager, a possible outcome

could be a prosecution or the issuance of a prohibition notice by the ORR, and/or a civil claim. The following costs could be incurred:

a) Prosecution (average) cost/fine = £200,000 including costs
b) Prohibition notice (cost of stopping operations, rectification costs and reputational damage) = £50,000
c) Civil claim (average amount for serious claim) = £100,000 pp including costs
d) Total = £350,000

4.5 If we assume that one fatality that leads to a prosecution would have occurred over a five-year period[1], then a potential cost of £350,000 could be incurred. If the Rule Book changes introduced contribute by 10% to avoiding this cost, then this is a total benefit of £35,000.

B. Health, safety and security

4.6 The RAIB investigations into the near miss at Camden Junction South on 28th February 2017 and the fatality at Stoats Nest Junction on 6th November 2018 both involved possession support staff placing protection. If the proposed changes result in avoiding one fatality over a five-year period, using the Value of Preventing a Fatality of £2,856,000 and if the Rule Book changes introduced contribute by 10% of avoiding this cost, then the total benefit would be £286,000 over a five-year period rounded to the nearest thousand.

4.7 The trackside environment can present a greater propensity for slips, trips and falls. A regime in which a reduced number of staff are required to be trackside placing or removing detonator protection may be expected to reduce the potential of minor accidents occurring trackside. A small reduction of, for example, 0.1% in the number of injuries might be assumed. If injury data from the Safety Risk Model is used for workforce slips, trips and falls on or about the line, the fatalities and weighted injuries (FWI) is 4.504. If there is a 0.1% reduction in risk as a result of introducing these changes, then this represents 0.004504 FWI per year. Using the Value of Preventing a Fatality (£2,856,000) this represents a benefit of £64,000 over five years, rounded to the nearest thousand[2].

4.8 The ability of a COSS to receive a work-site briefing and to 'sign in' with the ES is suggested as a means of avoiding unnecessary road journeys and exposure to the associated risks. A reduction in the extent of such risks can be anticipated, but it is not considered possible to make any accurate estimate of the extent of that reduction, and therefore no monetised benefit has been assumed.

C. Reliability and operation performance

4.9 The introduction of alternative possession limit controls has been demonstrated to provide efficiencies in relation to engineering possessions including:

a) Possessions can be granted and given up more quickly, increasing the proportion of productive time available within each access opportunity.

[1] These assumptions are based on internal judgement, in the absence of robust external evidence.

[2] RSSB SRM version 9, workplace slips, trips and falls risk FWI per year (national). 0.1% attribution is equivalent to £12,900 per year rounded to the nearest hundred.

b) This in turn increases the value of work that can be undertaken, or the costs of undertaking that work.
c) Possession overruns can be avoided, or the extent of overrun reduced.
d) The cost of possession support staff can be avoided.

4.10 The Network Rail project team have provided some figures of cost savings concerning possessions where alternative possession limit controls have been in use. These show a saving of £585,515 from periods 1 to 8 of 2025/26 from 1,228 possessions, largely through reduced numbers of possession support staff, and a reduction in the number of safe work packs prepared. The average saving per possession was approximately £475. Over a recent five-year period, the annual number of possessions totalled 52,574. If it proves possible to apply them to one third[3] of the number of possessions (approximately 17,584) and assuming the same level of savings were achieved as has been the case during the trial period, a benefit of £8,352,400 would be achieved. Over five years this represents a potential benefit of £41,762,000.

4.11 Network Rail routes estimated an average saving of between 5 and 26 minutes on each possession, but no estimate has been provided so far on the value of this in terms of increased production.

4.12 It is a frequent occurrence for detonator protection to be incorrectly placed, resulting in both detonators being exploded unnecessarily with resultant delay to trains, and an absence of any protection against trains entering a possession. There is however no readily quantifiable data on the extent to which this results in train delays.

4.13 The total reliability and operational performance benefit over five years would be £41,762,000.

D. Design and maintenance

4.14 These aspects are not significantly affected by the proposed changes.

E. People, process and systems

4.15 As with most Rule Book changes, there are direct costs of implementation due to the need for briefing or training. It is proposed by Network Rail that there will be a phased roll-out of the possession with engineering controls procedure, accompanied by local briefing and training. It is expected that this will avoid any need for enhanced briefing materials which would have been necessary to support introduction of significant changes through routine briefing processes.

F. Environment and sustainability

4.16 These aspects are not significantly affected by the proposed changes.

[3] One third is an assumption from the Network Rail project team and considered to be a conservative estimate.

G. Customer experience and industry reputation

4.17 Reduction of any impact on services attributed to incidents involving trackworkers while working would improve customer experience. It is not possible to quantify this impact, but it is anticipated to have a small positive impact on customer experience.

4.18 Reduction or elimination of high-profile accidents would reduce the possibility of reputational harm to the industry. This cannot readily be quantified.

5. What is the contribution of these standards changes in realising the value to industry opportunity?

5.1 The changes to the Rule Book suite are considered important and essential to realising the benefits to the industry. These changes will contribute to reducing safety risks in a critical and high-profile area. There would be benefits in the efficiency of engineering activity.

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

6.1 Objective 1 of the project will require a lead Rail Operations Specialist and a supporting Rail Operations Specialist to provide peer review and to ensure changes are compatible with the Rule Book App. The extent of original drafting so far as the changes to possession limit controls are concerned will be reduced, as Network Rail has facilitated a working group that has developed a draft which should not require extensive work to produce a final version. Input is also required from RSSB Policy, Risk, and Human Factors Specialists. There is also a requirement for some graphic design work to incorporate additional illustrations.

6.2 Additional effort will be required for project management, communications and development of briefing materials, and liaison with Willsons printers.

6.3 A similar level of effort is expected to be necessary for objective 2.

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

7.1 It is anticipated that the changes associated with objectives 1 to 4 can be delivered in line with the project's schedule and published in September 2026 for an in-force date of December 2026, which aligns with an industry view of a realistic date for completion of that task.

7.2 Completion of objective 5 one year later would align with an industry desire to stage its introduction to avoid an excessive volume of change in this subject area being introduced simultaneously.

8. How will the industry implement the change?

8.1 Implementation will require briefing and training of trackworkers and their employers. Materials will be supplied by RSSB, which will explain the key changes together with their rationale, and the need to adopt alternative methods of working where this is necessary.

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

9.1 RSSB will support the implementation of the standards through stakeholder engagement and will request feedback from users where required. In this case the changes are potentially significant, and a formal process to obtain feedback may be considered necessary.

9.2 RSSB will undertake a 12-month review following publication.

9.3 RSSB will monitor proposals for deviation and enquiries.

Appendix A. Disposition Table

Table A1: GERT8000-T3 issue 13 to GERT8000-T3 issue 14

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
1 Possession details	**1 General arrangements for possessions**	Revised – material change	This section has been renamed.	1
N/A	1.1 Possession procedures	New	This describes the two alternative procedures and defines the limits of a possession under each.	1
1.1 Possession details to be published	1.2 Possession details to be published	Revised – material change	This section has been renumbered as a result of introducing a new section 1.1. Reworded to include reference to the possession procedure to be used.	1
1.2 Changing the possession limits	1.3 Changing the possession limits	Revised – material change	This section has been renumbered as a result of introducing a new section 1.1. The word 'may' changed to 'can' in line with a preferred usage. This change has been made elsewhere. The requirement to record details no longer specifies that this in in the Train Register to allow for alternatives.	1
1.3 Changes to the published details	1.4 Changes to the published details	Revised – material change	This section has been renumbered as a result of introducing a new section 1.1.	1

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
2 Taking the possession 2.1 PICOP confirming the details	**2 Taking the possession** 2.1 PICOP confirming the details	Revised – material change	This now refers to the possession procedure and protection method, and detonator protection is referred to as if this is being used.	1
2.2 Taking possession around one or more engineering trains	2.2 Taking possession around one or more engineering trains	Revised – material change	The requirement to record details no longer specifies that this in in the Train Register to allow for alternatives. This change has been made throughout the module.	1
2.3 Arranging to block the line	2.3 Arranging to block the line	Revised – material change	Reference has been added, for completeness, to using reminder appliances and disabling automatic route setting. Reference added to carrying out absolute block regulation 3.6.12 for completeness. Reworded to avoid referring to 'assurance' which has recently been challenged as inappropriate as this can have a specific legal meaning.	1
N/A	**3 Possession with engineering controls**	New	This section describes the arrangements when this procedure is used.	1
N/A	3.1 Protection methods	New	This section describes the protection methods that can be used.	1
N/A	3.2 Disconnection of signalling equipment	New	This section describes from a signaller's perspective what happens when this protection method is used.	1

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
N/A	3.3 Use of RA T-COD	New	This section describes from a signaller's perspective what happens when this protection method is used.	1
N/A	3.4 Use of an RDSE device	New	This section describes from a signaller's perspective what happens when this protection method is used.	1
N/A	3.5 Use of SCAP	New	This section describes from a signaller's perspective what happens when this protection method is used.	1
N/A	3.6 Placement of first and last work-site marker boards (WSMBs)	New	The signaller must be advised of this when engineering controls are being used. Diagrams T3.1 to T3.3 are included to illustrate the arrangements. When only on-track plant is to be used in the possession, work-site marker boards (WSMBs) are only required for any work site in which they are to be used, or between which they are to be moved. The latter is an uncommon situation.	1
N/A	3.7 Trains entering the possession	New	This section describes the arrangements for a train entering the possession at the protecting signal or end of authority. Alternative instructions are provided depending on whether the first WSMB is in the signal section immediately beyond or not.	1
N/A	3.8 Trains leaving the possession	New	This section describes the arrangements for a train entering the possession at the possession exit signal. Alternative instructions are provided depending on whether the last WSMB is in the signal section immediately preceding or not.	1
N/A	3.9 'Back-to-back' possessions with engineering controls	New	This section describes the arrangements for these possessions, which are not permitted when engineering controls are in use and the line is under possession in relation to points. A new diagram T3.4 is provided.	1

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
N/A	3.10 Propelling and wrong-direction movements	New	These are only allowed to enter the possession if previously published, and only to leave the possession in an emergency after authority has been obtained through Operations Control.	1
N/A	**4 Possession without engineering controls (use of PLBs and detonators)**	New	This is a new section title to include content transferred from other sections.	1
2.4 Arranging detonator protection at the standard distance	4.1 Additional protection arrangements	Revised – material change	This section contains the content of the previous sections 2.4 and 2.5, and one paragraph from section 2.3. The diagram has been renumbered T3.5. The standard distance for detonator protection is changed to 200 metres for consistency with other procedures. No imperial conversion is shown. The standard distance was not previously included in the text.	1
2.5 If the standard distance is not available.	4.1 Additional protection arrangements	Revised – material change	This section contains the content of the previous sections 2.4 and 2.5. The diagram has been renumbered T3.6.	1
2.6 When detonator protection is in place	4.2 When detonator protection is in place	Revised – material change	This section contains the content of the previous section 2.6.	1

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
2.7 Using the token as protection	4.3 Using the token as protection	Revised – material change	This is regarded as a possession without engineering controls. The wording has been changed to allow PICOPs, who may be based remotely, to arrange for someone on their behalf to obtain and retain the token.	1
2.8 'Back-to-back' possessions	4.4 'Back-to-back' possessions without engineering controls	Revised – material change	This section contains the content of the previous sections 2.8. The title has been amended for clarity. The diagram has been renumbered T3.7.	1
4.1 Movements toward the possession	4.5 Movements toward the possession	Revised – material change	This section contains the content of the previous section 4.1.	1
4.2 Propelling	4.6 Propelling	Revised – material change	This section contains the content of the previous section 4.2.	1
4.3 Entering the possession at the detonator protection	4.7 Entering the possession at the detonator protection	Revised – material change	This section contains the content of the previous section 4.3.	1
4.6 Leaving the possession	4.8 Leaving the possession	Revised – material change	This section contains the content of the previous section 4.6.	1
4.8 Movements towards the detonator protection	4.9 Movements towards the detonator protection	Revised – material change	This section contains the content of the previous section 4.8.	1

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
4.9 Leaving the possession where there is no detonator protection	4.10 Leaving the possession where there is no detonator protection	Revised – material change	This section contains the content of the previous section 4.9.	1
N/A	**5 Entering or leaving a possession at an intermediate point**	New	This is a new section, containing the instructions for possession with or without engineering controls. For a possession without engineering controls there are no changes from the previous requirements.	1
4.4 Entering the possession at an intermediate point.	5.1 Entering the possession at an intermediate point.	Revised – material change	There are new instructions for a possession with engineering controls. For a possession without engineering controls, the instructions are unchanged.	1
4.5 Entering the possession from an adjacent siding under possession	5.2 Entering the possession from an adjacent siding under possession.	Revised – material change	There are no differences between the two possession procedures, and this contains the content of the previous section 4.5 without change.	1
4.7 Leaving the possession directly into a siding under possession	5.3 Leaving the possession directly into a siding under possession	Revised – material change	There are no differences between the two possession procedures, and this contains the content of the previous section 4.7 without change.	1

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
5 Movements over level crossings	**6 Arrangements and movements at level crossings for all protection methods**	Revised – material change	The title has been changed as these arrangements apply to all protection methods. All sections have been renumbered as 6.2 to 6.12 as a result of the introduction of new sections 3 and 6.1.	1
3 Arrangements at level crossings	6.1 General	New	This section contains the existing instructions on the arrangements that must be agreed concerning level crossings.	1
6 Change of personnel	**7 Change of personnel**	Revised – material change	This section and sections 6.1 and 6.2 have been renumbered as a result of the introduction of a new section 3.	1
7 Giving up the possession	**8 Giving up the possession**	Revised – material change	This section and sections 7.1 and 7.4 have been renumbered as a result of the introduction of a new section 3.	1
7.1 Giving up the possession around engineering trains	8.1 Giving up the possession around engineering trains	Revised – material change	This section contains the content of the previous section 7.1.	1
7.2 Removing the protection	8.2 Signaller being told when the possession is no longer needed	Revised – material change	The content of this section has been included in the revised section 8.2.	1
7.3 Signaller being told when the possession is no longer needed	8.2 Signaller being told when the possession is no longer needed	Revised – material change	This section includes the previous content of section 7.3. The section has been expanded to include the removal of protection from a possession with engineering controls. The section has also been changed to allow for PICOPs arranging for someone else to have obtained the token on their behalf.	1

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
7.4 Confirming the possession is given up	8.3 Confirming the possession is given up	Revised – material change	This section contains the content of the previous section 7.4.	
8 Resuming normal working	**9 Resuming normal working**	Revised – material change	This section, and sections 8.1 to 8.5 have been renumbered as a result of the introduction of the new section 3.	1
8.1 Restoring signals and block indicator	9.1 Restoring signals and block indicator	Revised – material change	For completeness, a reference has been added to carrying out absolute block regulation 3.6.14.	1
9 Driver's duties	**10 Driver's duties**	Revised – material change	This section has been renumbered as a result of the introduction of the new section 3.	1
N/A	10.1 General	Revised – material change	The first three paragraphs are new, and included for completeness. The remainder have been transferred from section 9.1	1
N/A	10.3 Authority for movement of engineering trains - possession with engineering controls	New	These are new instructions applying to a possession with engineering controls. A new diagram T3.10 has been included.	1
9.1 Authority for movement of engineering trains	10.4 Authority for movement of engineering trains - possession without engineering controls	Revised – material change	These instructions apply to a possession without engineering controls. New instructions have been added concerning the operation of the TPWS temporary isolating switch and reinstating TPWS. The diagram has been renumbered T3.11.	1

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
9.2 Reaching a clear understanding with others	10.5 Reaching a clear understanding with others	Revised – material change	This section has been renumbered as a result of the introduction of the new section 3. A new instruction has been added for completeness concerning the driver's actions if the instructions are not initially clear.	1
9.3 Headlights and tail lamps	10.6 Headlights and tail lamps	Revised – material change	This section has been renumbered as a result of the introduction of the new section 3.	1
9.4 Detonator protection	10.4 Authority for movement of engineering trains - T3 without engineering controls	Revised – material change	This explanation is now included in section 10.4.	1
9.5 Indicating each work site	10.2 Indicating each work site	Revised – material change	This section has been renumbered as a result of the introduction of the new section 3. A new instruction has been added concerning authority to pass the last WSMB if it is in the signal section approaching the possession exit signal in a possession with engineering controls. A new diagram T3.8 has been included showing the arrangements for a possession with engineering controls. Diagram T3.5 has been renumbered as diagram T3.9	1
9.6 During the movement	10.7 During the movement	Revised – material change	This section has been renumbered as a result of the introduction of the new section 3.	1
9.7 When a possession is to be taken around one or more engineering trains	10.8 When a possession is to be taken around one or more engineering trains	Revised – material change	This section has been renumbered as a result of the introduction of the new section 3.	1

From GERT8000-T3 Issue 13	To GERT8000-T3 issue 14	Way forward	Comments	Objective
9.8 When a possession is to be given up around engineering trains	10.9 When a possession is to be given up around engineering trains	Revised – material change	This section has been renumbered as a result of the introduction of the new section 3.	1
9.9 Leaving the possession	10.10 Leaving the possession	Revised – material change	This section has been renumbered as a result of the introduction of the new section 3. This now applies only to a possession without engineering controls.	1
10 Protection zones	**11 Protection zones**	Revised – material change	This section and sections 10.1 to 10.6 have been renumbered as a result of the introduction of the new section 3.	1

Table A2: GERT8000-HB11 issue 11 to GERT8000-HB11 issue 12.

From GERT8000-HB11 issue 11	To GERT8000-HB11 Issue 12	Way forward	Comments	Objective
1 Definitions	**1 Definitions and protection procedures**	Revised – material change	A definition of the two protection procedures has been included.	1
3 Possession details 3.1 Possession details to be published	**3 Possession details** 3.1 Possession details to be published	Revised – material change	This now includes the protection procedure to be used.	1
3.2 Changes to published details	3.2 Changes to published details	Revised – material change	This has been changed to include a change to the published method of providing additional protection.	1
4 Taking the possession 4.1 Confirming the details with the signaller	**4 Taking the possession** 4.1 Confirming the details with the signaller	Revised – material change	This has been changed to include confirmation of the possession procedure and protection method.	1
N/A	4.3 'Back-to-back' possessions for T3 with engineering controls	New	This is a new section describing the arrangements with a new diagram HB11.1. 'Back-to-back' possessions are not allowed in a possession with engineering controls in relation to points.	1
4.3 'Back-to-back' possessions	4.4 'Back-to-back' possessions for T3 without engineering controls	Revised – material change	This section has been renumbered as a result of the introduction of the new section 4.3. The diagram has been renumbered HB11.2.	1
N/A	**5 Possession with engineering controls – specific requirements**	New	This is a new section explaining the requirements from a PICOP's perspective.	1

From GERT8000-HB11 issue 11	To GERT8000-HB11 Issue 12	Way forward	Comments	Objective
N/A	5.1 Approved protection methods	New	This section lists the protection methods that can be used	1
N/A	5.2 Disconnection of signalling equipment	New	This section describes the arrangements that apply.	1
N/A	5.3 Use of RA T-COD	New	This section describes the arrangements that apply.	1
N/A	5.4 Use of an RDSE device	New	This section describes the arrangements that apply.	1
N/A	5.5 Use of SCAP	New	This section describes the arrangements that apply	1
N/A	**6 Possession without engineering controls – specific requirements**	New	This is a new section containing the requirements applying to a possession without engineering controls that were previously shown in other sections.	1
4.4 Arranging the detonator protection	6.1 Arranging the detonator protection	Revised – material change	This section has been renumbered as a result of the introduction of a new section 5.	1
4.5 Arranging detonator protection at the standard distance	6.2 Arranging detonator protection at the standard distance	Revised – material change	This section has been renumbered as a result of the introduction of a new section 5. The diagrams have been renumbered as a result of the introduction of the new diagram HB11.2. The standard distance for detonator protection is changed to 200 metres for consistency with other procedures. No imperial conversion is shown. The standard distance was not previously included in the text.	1
4.6 If the standard distance is not available	6.3 If the standard distance is not available	Revised – material change	This section has been renumbered as a result of the introduction of a new section 5.	1

From GERT8000-HB11 issue 11	To GERT8000-HB11 Issue 12	Way forward	Comments	Objective
4.7 When all detonator protection has been placed	6.4 When all detonator protection has been placed	Revised – material change	This section has been renumbered as a result of the introduction of a new section 5. The diagrams have been renumbered as a result of the introduction of the new diagram HB11.2.	1
4.8 Using the token as protection	6.5 Using the token as protection	Revised – material change	This section has been renumbered as a result of the introduction of a new section 5. This section has been changed to permit a PICOP, who may be based remotely, to arrange for someone else obtaining and retaining the token.	1
5 Arrangements for level crossings	**7 Arrangements for level crossings**	Revised – material change	These arrangements are now explained as applying to all protection procedures. This section and sections 5.1 to 5.4 have been renumbered as a result of the introduction of the new section 5.	1
6 Work sites	**8 Work sites**	Revised – material change	This section and sections 6.1 to 6.4 have been renumbered as a result of the introduction of the new section 5.	1
6.2 Indicating each work site	8.2 Indicating each work site	Revised – material change	This section contains only the instructions that apply both to a possession with or without engineering controls. This section has been changed to say that if only OTP is to work within the possession, WSMBs are only provided for the work sites affected.	1
N/A	8.3 Possession with engineering controls – additional requirements	New	This is a new section describing the requirements. There is a new diagram HB11.7	1
N/A	8.4 Possession without engineering controls – additional requirements	New	This section contains the arrangements when a WSMB is close to the detonator protection that were previously shown in section 6.2. An instruction has been included for completeness that the ES can set up WSMBs before the detonator protection is in place. The diagram has been renumbered HB11.8 as s a result of the introduction of new diagrams.	1

From GERT8000-HB11 issue 11	To GERT8000-HB11 Issue 12	Way forward	Comments	Objective
7 Allowing work to start outside a work site	**9 Transient work sites**	Revised – material change	The arrangements previously shown in section 7 no longer apply, and this renamed section now describes how a transient work site can be set up in their place.	2
N/A	**10 Train movements – possession with engineering controls**	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
N/A	10.1 General	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
N/A	10.2 Entering the possession towards the first WSMB	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
N/A	10.3 Entering the possession at an intermediate point - between work sites	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
N/A	10.4 Entering the possession at an intermediate point - directly into a work site	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
N/A	10.5 Entering the possession from an adjacent siding under possession	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
N/A	10.6 Leaving a work site	New	These instructions describe the arrangements that apply to a possession with engineering controls. A new diagram HB11.9 has been included.	1

From GERT8000-HB11 issue 11	To GERT8000-HB11 Issue 12	Way forward	Comments	Objective
N/A	10.7 Trains leaving the possession	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
N/A	10.8 Leaving the possession at an intermediate point	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
N/A	10.9 Leaving the possession directly into a siding under possession	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
8 Train movements	**11 Train movements – Possession without engineering controls**	Revised – material change	This section and sections 8.1 to 8.17 have been renumbered as a result of the introduction of new sections. The new section numbers are: • Sections 8.1 to 8.6 are now 11.1 to 11.1 to 11.6 • Sections 8.11 to 8.16 are now sections 11.7 to 11.12. The instructions apply to a possession without engineering controls. Remaining instructions in section 8 apply to any protection procedure and have been moved to section 12. The diagram has been renumbered HB11.10.	1
N/A	**12 General instructions for train movements**	New	This section contains instructions that apply to a possession both with and without engineering controls.	1
8.7 Moving between detonator protection and the work site or between work sites	12.1 Moving between detonator protection (where provided) and the work site or between work sites	Revised – material change	The title has been changed to allow a single instruction to apply to a possession both with and without engineering controls	1

From GERT8000-HB11 issue 11	To GERT8000-HB11 Issue 12	Way forward	Comments	Objective
8.8 Assisting a failed train, failed OTP or removing a portion of a divided train	12.2 Assisting a failed train, failed OTP or removing a portion of a divided train	Revised – material change	This section contains instructions that apply to a possession both with and without engineering controls. For completeness, the need to reach a clear understanding with the signaller is now mentioned.	1
8.9 Movement of multiple OTP	12.3 Movement of multiple OTP	Revised – material change	This section contains instructions that apply to a possession both with and without engineering controls.	1
8.10 Propelling	12.4 Propelling	Revised – material change	This section has been changed to say that propelling is not permitted outside the first and last WSMBs in a possession with engineering controls.	1
8.17 If work is to be carried out on a rail vehicle	12.5 If work is to be carried out on a rail vehicle	Revised – material change	This section contains instructions that apply to a possession both with and without engineering controls.	1
9 Movements over level crossings	**13 Movements over level crossings**	Revised – material change	This section and sections 9.1 to 9.10 have been renumbered as a result of the introduction of new sections.	1
10 Changing the possession limits	**14 Changing the possession limits**	Revised – material change	This section and sections 10.1 to 10.3 have been renumbered as a result of the introduction of new sections.	1
N/A	**15 Changing the location of the first or last WSMBs - possession with engineering controls**	New	This is a new section applying to a possession with engineering controls.	1
N/A	15.1 Changing the location of the first or last WSMBs	New	These instructions describe the arrangements that apply to a possession with engineering controls.	1
N/A	15.2 Recording the details	New	These instructions describe the arrangements that apply to a possession with engineering controls	1
11 Change of personnel	**16 Change of personnel**	Revised – material change	This section and sections 11.1 and 11.2 have been renumbered as a result of the introduction of new sections.	1

From GERT8000-HB11 issue 11	To GERT8000-HB11 Issue 12	Way forward	Comments	Objective
12 Giving up the possession	**17 Giving up the possession - general**	Revised – material change	This section contains instructions that apply to a possession both with and without engineering controls. This section and sections 12.1 and 12.2 have been renumbered as a result of the introduction of new sections.	1
12.1 Making sure the work is complete	17.1 Making sure the work is complete	Revised – material change	As there will no longer be a COSS or IWA relying on the protection arrangements in the PICOP's area of control, this instruction has been deleted.	2
N/A	**18 Giving up the possession - possession with engineering controls**	New	This is a new section applying to a possession with engineering controls.	1
N/A	18.1 Removing the protection	New	This is a new section explaining the requirements from a PICOP's perspective.	1
N/A	18.2 Confirming the possession is given up	New	This is a new section explaining the requirements from a PICOP's perspective.	1
12 Giving up the possession	**19 Giving up the possession - possession without engineering controls**	Revised – material change	This section contains instructions that apply to a possession without engineering controls, and has been renumbered as a result of the introduction of additional sections. Sections 12.3 to 12.5 have been renumbered 19.1 to 19.3	1
12.3 Removing the possession arrangements	19.1 Removing the possession arrangements	Revised – material change	As there will no longer be a COSS or IWA relying on the protection arrangements in the PICOP's area of control, this instruction has been deleted.	2

Table A3: GERT8000-HB12 issue 11 to GERT8000-HB12 issue 12. This table includes only those changes associated with this project, as other projects affect it.

From GERT8000-HB12 issue 11	To GERT8000-HB12 Issue 12	Way forward	Comments	Objective
3 Setting up the work site 3.1 Arranging to set up the work site	**3 Setting up the work site** 3.1 Arranging to set up the work site	Revised – material change	The PICOP and ES must also agree the possession procedure and protection method. A wording change has been made for presentational reasons.	1
N/A	3.4 Indicating the work site - possession with engineering controls	New	This is a new section explaining the requirements from an ES's perspective. If there is only OTP within a possession, WSMBs are only required if the work site will be affected by OTP working within it, or moving to another work site. A new diagram HB12.1 has been provided.	1
3.4 Indicating the work (Diagram HB12.1)	3.5 Indicating the work site - possession without engineering controls	Revised – material change	This section has been renumbered as a result of the introduction of a new section 3.4, and renamed. If there is only OTP within a possession, WSMBs are only required if the work site will be affected by OTP working within it, or moving to another work site. Diagram HB12.1 has been renamed HB12.2	1
3.5 When the work site is set up	3.6 When the work site is set up	Revised – material change	This section has been renumbered as a result of the introduction of a new section 3.4	1
N/A	3.7 Transient work sites	New	This is a new section explaining the requirements from an ES's perspective.	1
4 Agreeing the safe system of work with each COSS/IWA 4.1 Allowing work to take place	**4 Agreeing the safe system of work with each COSS/IWA** 4.1 Allowing work to take place	Revised – material change	The requirement to obtain a signature has been removed.	3

From GERT8000-HB12 issue 11	To GERT8000-HB12 Issue 12	Way forward	Comments	Objective
4.2 Agreeing the arrangements before the work site is granted	4.2 Agreeing the arrangements before the work site is granted	Revised – material change	The requirement to obtain a signature has been removed.	3
6 Train movements 6.1 General	**6 Train movements** 6.1 General	Revised – material change	The instructions concerning a COSS using lookout warning has been obsolete since the update of lookout rules in 2024 and has now been removed.	1
6.3 Entering the work site at an intermediate point	6.3 Entering the work site at an intermediate point	Revised – material change	A new diagram HB12.3 has been included.	1
6.4 Entering the work site from an adjacent siding under possession	6.4 Entering the work site from an adjacent siding under possession	Revised – material change	Diagram Hb12.2 has been renumbered HB12.4.	1
6.5 Movements towards the WSMB when it is at the detonator protection	6.5 Movements towards the WSMB when it is at the detonator protection - possession without engineering controls	Revised – material change	Renamed as this now applies to a possession without engineering controls.	1

From GERT8000-HB12 issue 11	To GERT8000-HB12 Issue 12	Way forward	Comments	Objective
N/A	6.6 Movements towards the WSMB when it is less than 200 metres (approximately 200 yards) from the protecting or possession exit signal - possession with engineering controls	New	This is a new instruction that applies to a possession with engineering controls.	1
N/A	6.7 Movement of trolleys - possession with engineering controls	New	This is a new instruction that applies to a possession with engineering controls.	1
6.6 Movement leaving the work site	6.8 Movement leaving the work site	Revised – material change	This section has been renumbered as a result of the introduction of new sections 6.6 and 6.7	1
N/A	6.9 Movement leaving the last work site – possession with engineering controls	New	This is a new instruction that applies to a possession with engineering controls.	1
6.7 Engineering train leaving the work site at an intermediate point	6.10 Engineering train leaving the work site at an intermediate point	Revised – material change	This section has been renumbered as a result of the introduction of new sections 6.6, 6.7 and 6.9.	1

From GERT8000-HB12 issue 11	To GERT8000-HB12 Issue 12	Way forward	Comments	Objective
6.8 Leaving the work site directly into a siding under possession	6.11 Leaving the work site directly into a siding under possession	Revised – material change	This section has been renumbered as a result of the introduction of new sections 6.6, 6.7 and 6.9.	1
6.9 If work is to be carried out on a rail vehicle	6.12 If work is to be carried out on a rail vehicle	Revised – material change	This section has been renumbered as a result of the introduction of new sections 6.6, 6.7 and 6.9.	1
N/A	**10 Shortening or lengthening a work site**	New	This is a new instruction not previously published, but which has greater significance in the case of a possession with engineering controls.	1
10 Giving up the work site	**11 Giving up the work site**	Revised – material change	This section and sections 10.1 to 10.3 have been renumbered as a result of the introduction of a new section 10.	1
10.3 When every COSS or IWA no longer needs protection	11.3 When every COSS or IWA no longer needs protection	Revised – material change	A new instruction has been added concerning the work site being the first or last, which is significant in a possession with engineering controls.	1
11 Protection zones	**12 Protection zones**	Revised – material change	This section and sections 11.1 to 11.9 have been renumbered as a result of the introduction of a new section 10.	1
11.1 Setting up the protection zone	12.1 Setting up the protection zone	Revised – material change	The minimum distance from the protecting signal has been changed to 200 metres (approximately 200 yards) for consistency with the requirements for a possession.	1

Table A4: GERT8000-HB9 issue 9 to GERT8000-HB9 issue 10.

From GERT8000-HB9 issue 9	To GERT8000-HB9 Issue 10	Way forward	Comments	Objective
3 Working within a work site 3.1 Agreeing the site of work with the ES	**3 Working within a work site** 3.1 Agreeing the site of work with the ES	Revised – material change	The requirement to sign the RT3199 certificate has been removed.	3
3.6 Safe system of work using equipment warning	3.6 Not used	Revised – material change	There is no requirement to continue with this form of protection, as a transient work site can be set up to allow any work that takes place outside a work site.	2
4 Working outside a work site	**4 Transient work sites**	Revised – material change	These new instructions have been introduced, as this is now the only method by which work can take place outside a normal work site.	2