

20-039 Guidance on Operational Railway Safety Awareness

Version:	2.0		
Purpose:	Approval to proceed to consultation		
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Lead industry committee:	Traffic Operation and Management Standards Committee (TOM SC)	Date:	31 January 2023
Supporting industry committee:	Plant Standards Committee (PLT SC)	Date:	05 January 2023

Decision

Traffic Operation and Management Standards Committee (TOM SC) is asked to:

DECIDE if the proposed version of GOGN3616 issue 1 delivers the intentions of the proposal for change.

DECIDE if the proposed version of GOGN3616 issue 1 is in a suitable state for consultation.

APPROVE that the proposed version of GOGN3616 issue 1 is consulted on.

IDENTIFY any specific organisations or individuals to be included in the consultation.

Plant Standards Committee (PLT SC) is asked to:

SUPPORT the proposed version of GOGN3616 issue 1 is consulted on.

IDENTIFY any specific organisations or individuals to be included in the consultation.

20-039 Guidance on Operational Railway Safety Awareness

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 documents

Number	Title	Issue
GOGN3616	Guidance on Operational Railway Safety Awareness	1

Summary

Background and change

Requirements for Personal Track Safety (PTS) training and assessment were formerly contained in Railway Group Standard GERT8067 Issue 1 Personal Track Safety, which was published in 2002 and withdrawn in 2007. There was some duplication with requirements contained in Rule Book Module GERT8000-G2 Issue 1 *Personal Safety When Walking on or Near the Line, or When on the Lineside*, which was live at the time and withdrawn in 2010.

Some requirements were retained and transferred to GERT8000-G1 Issue 4 *General Safety Responsibilities and Personal Track Safety for Non-Track Workers*, and GERT8000-HB1 Issue 1 *General Duties and Track Safety for Track Workers*. Other requirements were deemed to be out of scope for National Operations Publications, but relevant to company instructions or staff competence.

Over time, further PTS requirements have been removed from GERT8000-G1 and HB1. Personal track safety training is not standardised, and employers determine their own requirements as part of their competence management arrangements.

PTS is currently used to refer to the responsibilities and duties of working 'On or Near the Line' on the railway infrastructure. A standard PTS course does not cover depots, yards, sidings, and freight terminals and may not address the risks associated with operational tasks. Having relevant site knowledge is important to allow staff to work safely in or around the railway environment.

A Rail Industry Standard (RIS) would duplicate requirements under The Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended) (ROGS) and The Management of Health and Safety at Work Regulations 1999 concerning maintaining competence and reducing any risk to their employees' health, safety and welfare. A Rail Industry Guidance Note (GN) is an industry-recognised document that supports compliance with legislation; this will help the industry develop or update its training and competence frameworks, especially in depots.

Industry impact due to changes

Impact areas		Scale of impact	Estimated value £ 000's	
A. Legal compliance and assurance		Medium	£300,000	
B. Health, safety and security		Medium	£315,000	
C. Reliability and operational performance		Low	£45,665	
D. Design and maintenance		N/A	-	
E. People, process and systems		High	£1,785,000	
F. Environment and sustainability		N/A	-	
G. Customer experience and industry reputation		Low	No quantified benefits	
Total value of industry opportunity =			£2,445,665 over 5 years	
The standards change contribution to the total value of industry opportunity				
☐ None or low	☐ Minor but useful	☐ Moderate	☒ Important / essential	☐ Urgent / critical

Detail

1. What were the objectives associated with this change?

Objective 1 – To harmonise training and competence for railway undertakings' operational railway safety awareness.

- 1.1 Railway workers who must work on or near a line are subjected to risks including being struck by trains or other vehicles, electrocution, or trips and falls.
- 1.2 There is no existing common training and competence approach associated with personal track safety for railway undertakings available to the industry.
- 1.3 A PTS course and its associated competency cover a range of trackside skills and knowledge that track workers use regularly. A standard PTS course does not cover depots, yards, sidings, and freight terminals and may not address the risks associated with operational tasks.
- 1.4 Having relevant site knowledge is important to allow staff to work safely in or around the railway environment.
- 1.5 At an early stage of its investigation into the fatal accident at Tyseley depot on 14 December 2019, the Rail Accident Investigation Branch (RAIB) issued Urgent Safety Advice 01/2020. It noted that GERT8000, the Rule Book, was not appropriate as a sole basis of PTS training for drivers, as its requirements do not apply away from the GB mainline railway, and it contains no rules for passing between or close to stationary rail vehicles.
- 1.6 Facilitating harmonised training material and competence training framework for railway undertakings' operational railway safety awareness helps the industry keep rail workers safe whilst on the railway. The scope captures provisions not included in the Rule Book concerning personal track safety when working away from the GB mainline railway including depots, yards, sidings and freight terminals.
- 1.7 Network Rail and the infrastructure contractors currently manage PTS through the Sentinel system. This system is not generally used by railway undertakings. This standard change impacts railway undertakings that currently manage their PTS arrangements outside of the Sentinel system. The Sentinel scheme itself is out of scope, and as such, this standard change has no impact on organisations that currently use Sentinel.

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

Objective 1 – To harmonise training and competence for railway undertakings' operational railway safety awareness.

- 2.1 RSSB developed a harmonised framework for training and competency. The framework will be described in a new guidance note.
- 2.2 The framework incorporates the process to follow when developing operational railway safety awareness training and competence at railway undertakings, including:
 - a) Identifying industry good practice;

- b) A training and competence framework;
 - c) Analysed risk-based training needs for the roles affected, for example, mainline driver, depot driver, guard, rolling stock technicians, train presentation staff; and
 - d) Arrangements for ongoing competence management, aligned to ORR's competence management system cycle.
- 2.3 After the publication of the guidance note, the project will produce generic training materials that may include some or all of: videos, booklets, notes, presentations, and assessment papers. This is scheduled for the later part of the financial year 2023/24.
- 2.4 The project will also signpost to a dedicated operational railway safety awareness web page on the RSSB website.

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

- 3.1 The Rail Delivery Group submitted a request for help highlighting the problem in October 2020. Although no timescales were identified at the time, the request was prioritised within the TOM portfolio and progressed during the 22/23 financial year.

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 Under the RSSB Standards Code and the Manual, the scope of RSSB standards and guidance applies to the mainline railway in Great Britain (GB). Under the *Railways and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS) (as amended)*, the mainline railway generally excludes:
- a) Sidings (except for turnback or reversing sidings; and loop, lay-by or lay-over sidings, which are part of the mainline railway); and
 - b) Any part that is within a maintenance or goods depot.
- 4.2 However, controllers of safety-critical staff still have duties under ROGS to manage safety-critical tasks carried out on sidings and depots.
- 4.3 Although RSSB standards published under the Standards Code and Standards Manual apply to the GB mainline railway, operators of depots and sidings can still choose to apply these as part of their safety management systems. As an employer, a railway undertaking is required, under the *Management of Health and Safety at Work Regulations 1999*, to undertake a suitable and sufficient assessment of the risks that its activities present to its employees and others, including contractors and the public. This will include work carried out on the GB mainline railway and within depots and sidings. Measures developed from such risk assessment need to encompass training, knowledge and experience.

- 4.4 Regulation 24 of ROGS requires controllers of safety-critical work to ensure that persons carrying out safety-critical tasks have been assessed as being competent and fit. There should be an accurate and up-to-date written record of a person's competence and fitness. This record should be available for inspection, on reasonable request, and there should be arrangements in place for monitoring the competence and fitness of individuals.
- 4.5 In addition, Schedule 1 of ROGS requires that the safety management system provides programmes for the training of persons carrying out work, or voluntary work, directly in relation to the operation and systems to ensure that the competence of such persons is maintained and that they carry out tasks accordingly.
- 4.6 The proposed document will provide railway undertakings with a framework that, if adopted, will help them to satisfy their obligations.
- 4.7 The Office of Rail and Road (ORR) has published guidance describing the principles and factors that should be considered in any competence management system and explains how to ensure that the competence of individuals and teams satisfies the requirements of existing legislation. The proposed document's framework will be aligned with this guidance and further help RUs comply with legislation.
- 4.8 If a serious injury is caused when work is carried out on the GB mainline railway or within depots and sidings, then likely outcomes may include:
- a) Being issued with a prohibition notice; or
 - b) Prosecution proceedings; and/or
 - c) A civil claim.
- 4.9 If one such incident occurs within the industry over the course of five years, leading to a prohibition notice and civil claim, the cost for a railway undertaking could total £150,000¹. In addition, the cost in fines for a railway undertaking in more extreme cases could total £1.5 million, as demonstrated by a recent prosecution brought by the ORR following the death of an employee at a depot. If the changes introduced in the proposed standard contribute by 10% to avoiding this cost, then this is a total benefit of £150,000 over five years. Therefore, the total benefit from avoiding a prohibition notice, civil claim and prosecution is £300,000.

B. Health, safety and security

- 4.10 Training needs for the roles affected will be analysed to align safe, consistent, working practices with no increase in workload. This will promote consistency and alignment with instructions across the industry.
- 4.11 Introducing a competence framework and formalising operational railway safety awareness requirements could provide a benefit to the industry of £315,000 over five years. The Safety Risk Model recorded an increase in workforce slips, trips or falls less than 2 metres from the track. The risk of workforce slip, trip or falls less than 2 m from the track, is 0.320 FWI per year.

¹ Prohibition notice (cost of stopping operations, rectification costs and reputational damage) = £50,000. Civil claim (average amount for serious claim) = £100,000 pp including costs. Total = £150,000.

If there is a 3% reduction in risk as a result of introducing a competence framework and formalising operational railway safety awareness requirements, then this represents 0.010 FWI per year. Using the Value of Preventing a Fatality (£2,100,000) this represents a benefit of £210,000 over five years.

- 4.12 The risk to the workforce (not infrastructure workers) of being struck or crushed by a train is 0.322 FWI per year. If there is a 3% reduction in risk as a result of introducing a competence framework and formalising operational railway safety awareness requirements, then this represents 0.010 FWI per year. Using the Value of Preventing a Fatality (£2,100,000) this represents a benefit of £105,000 over five years.

C. Reliability and operation performance

- 4.13 The way in which the performance attribution process works makes it difficult to extract staff safety incidents, in particular slips, trips and falls. Increased safety awareness would be expected to improve delays to trains entering service due to safety incidents with drivers. Considering the benefits of this in terms of delay minutes, a conservative estimate, that formalising operational railway safety awareness requirements might prevent 1% of incidents, would represent a saving of £45,665 over five years².

D. Design and maintenance

- 4.14 This area is not directly applicable to the changes.

E. People, process and systems

- 4.15 As with most framework changes, there are direct costs of implementation due to the need for briefing or training. There may be a cost to adopting the framework as it may be inconsistent with current arrangements. This will be a new framework targeted at the organisational level and intended to deliver greater consistency across railway undertakings. RSSB plans to deliver structured briefing sessions to practitioners responsible for developing and maintaining staff competence within railway undertakings. This will help alleviate or compensate for the extra cost to improve take-up, understanding and effective implementation.
- 4.16 The cost of RSSB developing a framework for the industry that will require minimal adaptation and is considered a 'Code of Practice' by the regulator is approximately £105,000. It is estimated that 90-100% of railway undertakings will adopt the framework and any created training material, saving industry approx. £1,785,000³.

F. Environment and sustainability

- 4.17 This area is not directly applicable to the changes.

² Delays due to train crew problems cost the industry 121,771 delay minutes in the financial year 2019/2020 at a value of £50 a minute. If 15% of these problems (18,266 delay minutes) are due to safety-related incidents such as slips, trips and falls, this represents a cost of £913,300. Preventing 1% of incidents saves £9,133, which, over 5 years, is equivalent to saving £45,665.

³ Example: The anticipated final cost of the project (AFC) is approx. £105k. If 90% of RSSB RU members (45) had to develop their own framework and material, they could be individually exposed to 50% of the AFC (approx. £52.5K). With RSSB developing a common framework and material that is intended to be plugged into their businesses with minimal adaption, their exposure to implementation costs and adaption is reduced - approx. 20% of their original exposure (£52.5K * 0.2 = £10.5K). Therefore, the benefit could be £2,362,500 (£52.5K*45) – RSSB costs (£105K) and RU implementation costs (£10.5K*45) £472,500 = £1,785,000.

G. Customer experience and industry reputation

- 4.18 Accidents to staff, such as the fatal accident at Tyseley depot, are usually widely reported on local and national news channels. Standardising operational railway safety awareness requirements will support the rail sector's efforts to maintain a safe working environment for those employed in the industry by reducing the potential to suffer harm for those whose activities include going on or near the line.
- 4.19 The framework will, if adopted, make a considerable contribution to improving safety performance in several areas and help to improve the rail industry's safety performance.

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

- 5.1 As demonstrated through the quantification of benefits in section 4 of this document, the introduction of a common operational railway safety awareness competence framework can contribute to reducing the risk of harm to those working in the GB rail sector, including those working away from the GB mainline railway for example, in depots, yards, sidings and freight terminals.

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

- 6.1 RSSB engaged with stakeholder groups, Rail Partner's Operations Standards Forum, Train Accident Risk Group, Depot Working Group and Stations Working Group.
- 6.2 RSSB engaged with Train Operating Companies (TOCs), Freight Operating Companies (FOCs) and Network Rail to identify good practices and facilitated a drafting group to input and comment on the draft document.

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

- 7.1 RSSB allocated the necessary resources to develop this work, which aims to reach the consultation stage by the end of the financial year 2022/23, and with a view to publish the guidance note at the beginning of the financial year 2023/24, followed by training materials later in 2023/24.

8. How will the industry implement the change?

- 8.1 The content of the proposed published standard will enable railway undertakings to review their existing arrangements and identify areas that could potentially be improved through the adoption of the new framework and training materials. The benefits associated with the project will be effectively communicated to the target audience. This is to compel them to take the necessary action to realise the benefits applicable to their business context and those of the wider industry.

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

- 9.1 RSSB will review the resulting document one year after its publication to assess whether its content is fit for purpose. During the review, we will seek specific feedback from railway undertakings and anyone else that has adopted and implemented the changes.