

# **Managing Train Accident Risk Arising from Train Operations**

## **Synopsis**

This document sets out requirements and guidance for the management of train accident risk arising from train operations as part of the GB rail industry's agreed strategy for improving health and safety, 'Leading Health and Safety on Britain's Railway'.

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## Managing Train Accident Risk Arising from Train Operations

### Issue record

Issue	Date	Comments
One	07/03/2020	Original document.
1.1	04/03/2023 [proposed]	Amended and re-issued to remove references to infrastructure assets, as this no longer falls within the remit of TARG under the new LHSBR structure, and other minor amendments to references to TARG responsibilities as a result of the updated TARG risk profile. Updated references following publication of LHSBR issue three. No change to any technical content.

Revisions have been marked by a vertical black line in this issue. Definitions and References may also have been updated but these are not marked by a vertical black line.

### Superseded documents

Superseded documents	Sections superseded	Date when sections are superseded
RIS-3704-TOM issue One Managing Train Accident Risk Arising from Infrastructure Assets and Train Operations	All	04/03/2023 [proposed]

### Supply

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# Managing Train Accident Risk Arising from Train Operations

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## Part 1 Purpose and introduction

### 1.1 Purpose

- 1.1.1 This document sets out requirements and guidance for the management of train accident risk arising from train operations as part of the GB rail industry's agreed strategy for improving health and safety, 'Leading Health and Safety on Britain's Railway' (LHSBR).
- 1.1.2 LHSBR is intended to identify specific areas where:
  - a) Initiatives may help to reduce harm; and
  - b) Companies can work together, within and beyond legislative requirements, to achieve greater reductions in overall harm.
- 1.1.3 As part of LHSBR, the industry has identified a number of risk areas that are a focus for specific, priority initiatives.
- 1.1.4 RSSB facilitates the System Safety Risk Group (SSRG), which monitors national collaboration in several of these focus areas through a network of specialist risk groups.
- 1.1.5 The Train Accident Risk Group (TARG) is one of the specialist risk groups that report to SSRG. It is the lead industry co-ordination group for the risk focus area of train operations (section 10 of LHSBR). This includes monitoring the strategic risk profile associated with train accidents (excluding those at level crossings) on the GB mainline railway, including (but not limited to) accidents related to objects on the line, signals passed at danger (SPADs), over-speeding, adhesion, or any other risks as directed by SSRG, as per the TARG risk profile.
- 1.1.6 TARG also contributes to industry communication channels such as RED videos and Right Track magazine, which are overseen by the SSRG editorial board.
- 1.1.7 LHSBR promotes the use of RSSB's 'Taking Safe Decisions' framework as good practice for the management of safety risks. Taking Safe Decisions recommends the continuous monitoring and review of safety performance to identify concerns and provides a framework for determining whether changes are required when concerns do arise. LHSBR and Taking Safe Decisions are both available from the RSSB website.
- 1.1.8 Effective adoption of the Taking Safe Decisions approach benefits individual companies in managing their own safety risks and facilitates collaboration between companies through the network of specialist risk groups that report to SSRG.
- 1.1.9 TARG monitors safety performance in its specified focus area of train operations: this means it can identify trends and safety concerns at a national level and assist the industry in taking appropriate actions to improve the safety of the GB railway network.
- 1.1.10 TARG's remit obliges it to develop a communications plan to support the dissemination of information to the GB rail industry. In practice this requirement is met through the formation of local operational safety groups, each of which is allocated a geographical area defined by the infrastructure manager.

1.1.11 This document contains requirements, rationale and guidance to enable an effective, two-way flow of safety intelligence between TARG and local operational safety groups to manage train accident risk. This information flow will assist TARG in identifying emerging trends, and providing appropriate guidance and support to local groups.

1.1.12 Co-operation between infrastructure managers and railway undertakings is a legal obligation under Regulation 22 of the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended) (ROGS). This document is also intended to assist infrastructure managers and railway undertakings in meeting this obligation as far as the monitoring of train accident risk is concerned.

## 1.2 Application of this document

1.2.1 Compliance requirements and dates have not been specified because these are the subject of internal procedures or contract conditions.

1.2.2 If you plan to do something that does not comply with a requirement in this RIS, you can ask a Standards Committee to comment on your proposed alternative. If you want a Standards Committee to do this, please submit your deviation application form to RSSB. You can find advice and guidance on using alternative requirements on RSSB's website [www.rssb.co.uk](http://www.rssb.co.uk).

## 1.3 Health and safety responsibilities

1.3.1 Users of documents published by RSSB are reminded of the need to consider their own responsibilities to ensure health and safety at work and their own duties under health and safety legislation. RSSB does not warrant that compliance with all or any documents published by RSSB is sufficient in itself to ensure safe systems of work or operation or to satisfy such responsibilities or duties.

## 1.4 Structure of this document

1.4.1 This document sets out a series of requirements that are sequentially numbered. This document also sets out the rationale for the requirement, explaining why the requirement is needed and its purpose and, where relevant, guidance to support the requirement. The rationale and the guidance are prefixed by the letter 'G'.

1.4.2 Some subjects do not have specific requirements but the subject is addressed through guidance only and, where this is the case, it is distinguished under a heading of 'Guidance' and is prefixed by the letter 'G'.

## 1.5 Approval and authorisation of this document

1.5.1 The content of this document was approved by the Traffic Operation and Management Standards Committee on 06 December 2022.

1.5.2 This document will be authorised by RSSB on 27 January 2023 [proposed].

## Part 2 Requirements for infrastructure managers and railway undertakings

### 2.1 Establishing local operational safety groups

- 2.1.1 Infrastructure managers and railway undertakings shall establish local operational safety groups, whose remit includes the management, through liaison with the Train Accident Risk Group (TARG), of train accident risk arising from train operations.

#### Rationale

- G 2.1.2 Collaboration between infrastructure managers and railway undertakings enables the formation of local operational safety groups which will be aware of emerging issues with potential implications for train accident risk in their areas, such as the introduction of new train fleets or re-signalling schemes.
- G 2.1.3 TARG monitors safety-related data that are gathered by RSSB on behalf of the GB Rail Industry through the Safety Management Intelligence System (SMIS). Input from local operational safety groups complements these data and enables TARG to gain a comprehensive understanding of current and emerging safety risks from a national perspective. This helps TARG to fulfil its purpose of monitoring safety performance in its specific risk focus areas.
- G 2.1.4 Local operational safety groups are able to coordinate action at a local level to address safety issues identified by TARG.

#### Guidance

- G 2.1.5 Local groups are currently allocated responsibility for a route, as defined by the infrastructure manager. These groups are known by a variety of names including Operations Risk and Mitigation group (OPSRAM), Train Operations Sub-Groups (TOSG) and Operations Risk Reduction Groups (ORRG).
- G 2.1.6 The effectiveness of local groups will depend on several factors, including, but not limited to:
- Attendance by members with knowledge of local issues.
  - The cascading of national safety issues through a structured communication channel from TARG.
  - Attendance by members with a level of seniority that enables them to influence actions taken by their own and other organisations.
  - Representation of stakeholders from across the rail industry, such as train operating companies, freight operating companies, infrastructure managers, infrastructure contractors and regulators.
  - The frequency of meetings relative to TARG's meeting schedule.
- G 2.1.7 The remits for local operational safety groups may include discussion and monitoring of other LHSBR focus areas in addition to the specific areas of responsibility for TARG.
- G 2.1.8 Other local groups, such as communications review groups, may feed information into the local operational safety groups to support the activities defined in this document.

- G 2.1.9 Co-operation between infrastructure managers and railway undertakings is a legal obligation under Regulation 22 of the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended) (ROGS). The ORR publishes A Guide to ROGS, which is available from their website.
- G 2.1.10 Appendix A provides further guidance on suggested attendees and topics for discussion at local operational safety groups.

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## 2.2 Passing information to TARG

- 2.2.1 Infrastructure managers and railway undertakings shall put arrangements in place to ensure that local operational safety groups pass information on the management of train accident risk to TARG.

### Rationale

- G 2.2.2 Information flowing into TARG from a local level enables it to identify and respond to emerging safety trends that may not be apparent from data analysis alone.
- G 2.2.3 This information improves the effectiveness of TARG by ensuring that it is focusing on current safety issues: local operational safety groups can indicate whether they believe the issues identified by TARG are priorities and decide whether action is required in their areas, or raise new issues for consideration.
- G 2.2.4 Identifying safety priorities and concerns is the first step towards taking action in the Taking Safe Decisions risk management framework.

### Guidance

- G 2.2.5 When TARG has a comprehensive understanding of current and emerging safety risks it can coordinate action at a national level to address these.
- G 2.2.6 TARG monitors retrospective national safety data collected through SMIS. This information is complemented by reporting of emerging issues, new schemes and local issues from local groups.
- G 2.2.7 TARG can take other actions including:
- Advising RSSB on safety priorities, to determine if and how RSSB products, services or work programmes could help to address these both nationally and at a local level.
  - Suggesting items for inclusion in RSSB's industry-wide safety communications, including RED, Right Track and other publications that may be produced on an ad hoc basis.
- G 2.2.8 Each local operational safety group has a nominated representative who attends TARG and acts as a point of contact for liaison between the two groups.

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## 2.3 Sharing good practice

- 2.3.1 Infrastructure managers and railway undertakings shall share good practice on the management of train accident risk.

## Rationale

- G 2.3.2 Collaboration and communication between infrastructure managers and railway undertakings enables safety issues and good practice identified locally to be shared and monitored nationally. Local operational safety groups can use this information to coordinate action to address safety risks identified by TARG.

## Guidance

- G 2.3.3 Up to date information from local operational safety groups about issues being experienced locally, and action taken to address them, enables good practice to be shared across the industry. At any given time, there will be multiple different safety initiatives underway at a local level; some of these will be yielding positive results and could therefore be nationally applicable.
- G 2.3.4 Local operational safety groups can communicate directly with each other to discuss emerging safety issues and share good practice. TARG can also act as a hub for sharing local good practice nationally and therefore reducing train accident risk. This in turn will assist infrastructure managers and railway undertakings in achieving continuous improvement in their management of safety, as required by Schedule 1 of ROGS.
- G 2.3.5 Safety intelligence gained through collaboration between local operational safety groups and TARG can be used to coordinate local actions to reduce train accident risk.
- G 2.3.6 TARG produces a safety performance bulletin after each of its meetings that is distributed to local operational safety groups.
- G 2.3.7 TARG may be able to refer local operational safety groups to resources or other local expertise to assist them in addressing current and emerging safety risks. Illustrative examples may include:
- Guidance or good practice documents from organisations such as RSSB, ORR or the Rail Delivery Group.
  - RSSB research project reports.
  - Case studies of local initiatives that have yielded positive results.
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## Appendices

### Appendix A Suggested topics for discussion at a local operational safety group

**Note:** The content of this appendix is provided for guidance only.

#### Introductory guidance

- A.1 LHSBR sets out the GB railway industry's commitment to continuously improving its health and safety performance.
- A.2 Continuous improvement in health and safety performance, which is also a legal requirement under Schedule 1 of ROGS, requires that infrastructure managers and railway undertakings are aware of their own risk profiles.
- A.3 Infrastructure managers and railway undertakings whose activities affect one another are legally obliged, under Regulation 22 of ROGS, to co-operate to make sure the railway is safe. Local operational safety groups are a forum that can facilitate this co-operation.
- A.4 This appendix contains suggested topics for inclusion in the remit of a local operational safety group: some of these topics are based on TARG's core remit, others are additional to it. The topics in this appendix are guidelines and do not form a definitive or exhaustive list.
- A.5 It is important that infrastructure managers and railway undertakings clearly understand their own operational risk profiles: these will depend on a range of local factors, and are likely to vary over time. This may mean that certain topics in this appendix are omitted as they are not considered relevant, and/or that supplementary topics are added to address specific local or emerging operational risks.

#### TARG's remit

- A.6 The risk areas covered by TARG's remit are included here to assist local operational safety groups in communicating information to TARG that will enable it to meet its responsibilities under LHSBR.
- A.7 TARG is the lead industry co-ordination group for SSRG's risk focus area of train operations.
- A.8 Train operations includes monitoring the strategic risk profile associated with train accidents, excluding at level crossings, where these occur on the GB mainline railway, and are related to:
  - Objects on the line.
  - SPADs.
  - Over-speeding.
  - Adhesion.
  - Any other risks as directed by SSRG.

## Areas of shared risk

- A.9 By monitoring and managing areas of shared operational risk, infrastructure managers and railway undertakings can co-operate to reduce overall train accident risk.
- A.10 Areas of joint operational risk include, but are not limited to:
- Signals passed at danger (SPADs), including SPAD precursor events such as Train Protection and Warning System (TPWS) activations and interventions and station overruns.
  - Operating irregularities and incidents, including over-speeding events.
  - Level crossing incidents.
  - Safety-critical communications.

## Learning from operational experience, anticipating emerging risks and sharing good practice

- A.11 Reviewing safety performance since the last meeting enables a local operational safety group to identify emerging incident trends or safety risks. This may inform the priorities for discussion at a given meeting.
- A.12 Reviewing trends in incident causes, incident reports and investigations may enable participants in local operational safety groups to learn transferable lessons from operational experience.
- A.13 Looking forwards will help local operational safety groups anticipate upcoming changes or developments that may impact on the train accident risk profile in their area. Examples of these changes may include:
- Timetable changes.
  - New signalling schemes.
  - New rolling stock fleets.
  - Seasonal issues.
- A.14 Local operational safety group meetings provide an opportunity for the companies represented to discuss and review safety action plans, new safety initiatives and case studies of good practice. This enables those present to share safety intelligence with each other, as well as with TARG.

## Meeting frequency

- A.15 Aligning local operational safety group meetings with TARG's schedule will facilitate the flow of safety intelligence between both groups.
- A.16 TARG meets every quarter, with meetings scheduled up to a year in advance. Current TARG meeting dates may be requested by contacting [TARG@rssb.co.uk](mailto:TARG@rssb.co.uk).
- A.17 In some circumstances, convening special local operational safety group meetings may help to address emerging or future risks, for example sudden peaks in SPADs or other operational incidents, or a significant change to the timetable. Depending on the issues to be discussed, special meetings might consist of a sub-group of members chosen for their relevant subject matter expertise.

## Participation

- A.18 The effectiveness of local operational safety groups will be enhanced by the attendance of members who, between them, are able to provide:
- a) Technical knowledge of engineering, operations and other safety issues;
  - b) Current information on incidents, emerging issues and safety trends; and
  - c) Sufficient seniority to enable the group to influence decision making at a strategic level.
- A.19 Representation from a range of companies including infrastructure managers and different types of railway undertaking (train operating companies, freight operating companies and infrastructure contractors) will enable a full discussion of safety issues.
- A.20 Attendance at meetings by a representative from TARG will facilitate the flow of safety intelligence between the groups by:
- a) Cascading key messages and information from TARG meetings; and
  - b) Providing a channel through which emerging safety issues can be escalated to TARG.

## Definitions

infrastructure manager (IM)	Has the meaning given to it in the Railways and Other Guided Transport Systems (Safety) Regulations 2006 (as amended), but is limited to those infrastructure managers who hold a safety authorisation issued in respect of the mainline railway. Source: <i>ROGS</i>
railway undertaking (RU)	Has the meaning given to the term 'transport undertaking' in the Railways and Other Guided Transport Systems (Safety) Regulations 2006 as amended, but is limited to any private or public undertaking the principal business of which is to provide rail transport services for goods and/or passengers, with a requirement that the undertaking must ensure traction. Source: <i>ROGS</i>

## References

The Standards catalogue gives the current issue number and status of documents published by RSSB: <https://www.rsb.co.uk/standards-catalogue>.

RGSC 01	Railway Group Standards Code
RGSC 02	Standards Manual

## Documents referenced in the text

### RSSB documents

LHSBR, issue 3	Leading Health and Safety on Britain's Railway, April 2020
TSD, issue 3	Taking Safe Decisions, August 2019

### Other references

SI 2066/599	Railways and Other Guided Transport Systems (Safety) Regulations 2006. Amended by, among other things: (SI 2011/1860), (SI 2013/950), (SI 2015/1917) and (EU Exit Regulations (SI 2019/345) [amended by (SI 2020/786), (SI 2020/318) and (SI 2019/1310)]
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