Low Adhesion between the Wheel and the Rail - Managing the Risk

Synopsis
This document sets out the requirements to identify and plan the mitigation of conditions of low adhesions between the wheel and the rail.
Low Adhesion between the Wheel and the Rail - Managing the Risk

Issue record

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<th>Date</th>
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<td>December 2016</td>
<td>Replaces Railway Group Standard GERT8040, issue two as it could not be retained as a National Safety Rule and is therefore reclassified as a Rail Industry Standard.</td>
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Superseded or replaced documents

The following Railway Group documents are superseded or replaced, either in whole or in part as indicated:

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GERT8040 ceases to be in force and is withdrawn as of 04 March 2017.

Supply

The authoritative version of this document is available at [www.rssb.co.uk/railway-group-standards](http://www.rssb.co.uk/railway-group-standards). Enquiries on this document can be forwarded to enquirydesk@rssb.co.uk.
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Part 1  Introduction

1.1  Purpose of this document

1.1.1  GERT8040 ‘Low Adhesions between the Wheel and the Rail – Managing the Risk’, issue two duplicates European requirements of OPE TSI requiring railway undertakings and infrastructure managers to jointly define, publish and make available appropriate contingency arrangements in these instances. Therefore there is no requirement for a National Safety Rule (NSR) requiring the same thing.

1.1.2  It was therefore formally ‘redundant’ as a NSR, and therefore also as a Railway Group Standard. As a consequence, it has been withdrawn.

1.1.3  GERT8040 has therefore been replaced by this Rail Industry Standard (RIS-8040-TOM) ‘Low Adhesions between the Wheel and the Rail – Managing the Risk’, which reproduces the content of GERT8040 in its entirety as Annex A of this RIS.

1.2  Application of this document

1.2.1  A member of RSSB may choose to adopt all or part of this document through internal procedures or contract conditions. Where this is the case the member of RSSB will specify the nature and extent of application.

1.2.2  Therefore compliance requirements and dates have not been specified since these will be the subject of internal procedures or contract conditions.

1.2.3  The Standards Manual does not currently provide a formal process for deviating from RISs. However, a member of RSSB, having adopted a RIS and wishing to deviate from its requirements, may request a Standards Committee to provide observations and comments on their proposed alternative to the requirement in the RIS. Requests for opinions and comments should be submitted to RSSB by e-mail to proposals.deviation@rssb.co.uk. When formulating a request, consideration should be given to the advice set out in the ‘Guidance to applicants and members of Standards Committee on deviation applications’, available from RSSB’s website.

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  Approval and authorisation of this document

1.4.1  The content of this document was approved by Traffic Operation and Management Standards Committee on 12 July 2016.

1.4.2  This document was authorised by RSSB on 30 September 2016.
Low Adhesion between the Wheel and the Rail - Managing the Risk

Annex A

Content of GERT8040, issue two, Low Adhesions between the Wheel and the Rail – Managing the Risk
Low Adhesion between the Wheel and the Rail – Managing the Risk

Synopsis
This document mandates the actions required to identify and plan the mitigation of conditions of low adhesion between the wheel and the rail.

Content [to be] approved by:

TOM SC Standards Committee on 9 December 2008

Authorised by RSSB on 9 December 2008
Railway Group Standard
GE/RT8040
Issue Two
Date February 2009

Low Adhesion between the Wheel and the Rail – Managing the Risk

Issue record

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Revisions have not been marked by a vertical black line in this issue because the document has been revised throughout.

Supply

The authoritative version of this document is available at www.rgsonline.co.uk. Uncontrolled copies of this document can be obtained from Communications, Rail Safety and Standard Board, Evergreen House, 160 Euston Road, London NW1 2DX, telephone 020 7904 7518 or e-mail enquiries@rssb.co.uk. Other Standards and associated documents can also be viewed at www.rgsonline.co.uk.
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Part 1  Purpose and Introduction

1.1  Purpose

1.1.1  This document mandates the actions required to identify, respond to, and plan the mitigation of, conditions of low adhesion between the wheel and the rail.

1.2  Introduction

1.2.1  Background

1.2.1.1  The re-issue of this document reflects the requirements within Safe Movement of Trains (Railway Safety Publication 3) (edition 2, 2007) published by the Office of Rail Regulation which requires liaison between infrastructure managers and railway undertakings to develop co-ordinated plans to identify, communicate and deal with conditions of low adhesion.

1.2.2  Related requirements in other documents

1.2.2.1  GE/RT8000  Rule Book
        GM/RT2461  Sanding Equipment Fitted to Multiple Units and On-Track Machines
Part 2 Requirements

2.1 Joint requirements for infrastructure managers and railway undertakings

2.1.1 General requirements

2.1.1.1 Infrastructure managers and railway undertakings shall jointly implement measures to reduce the risks generated by low adhesion between the wheel and the rail that cannot be eliminated by local treatment at specific sites.

2.1.2 Establishing site specific action plans

2.1.2.1 Infrastructure managers and railway undertakings shall jointly develop site specific action plans.

2.1.2.2 Infrastructure managers and railway undertakings shall, within site specific action plans, set out measures to eliminate the risks identified during the assessment, or mitigate them if elimination is not reasonably practicable.

2.1.3 Content of site specific action plans

2.1.3.1 Infrastructure managers and railway undertakings shall include, within site specific action plans, details of the following (as a minimum):

a) Any potential risks from low adhesion at each site

b) The measures required to control identified risks from low adhesion

c) The features at each site that may affect adhesion between the wheel and the rail

d) The staff responsible for implementing the actions to be taken when conditions of low adhesion arise

e) Any train borne equipment fitted to reduce the risk of low adhesion.

2.1.3.2 Infrastructure managers and railway undertakings shall determine whether the measures included in site specific action plans will introduce a risk of train detection system failures.

2.1.4 Review of site specific action plans

2.1.4.1 Infrastructure managers and railway undertakings shall monitor performance of site specific action plans.

2.1.4.2 Infrastructure managers and railway undertakings shall jointly determine the frequency that each site specific action plan needs to be reviewed.

2.1.4.3 Infrastructure managers and railway undertakings shall, as part of any periodic review of site specific action plans, include the views of drivers regarding the effectiveness of the action taken at low adhesion sites.

2.2 Requirements for infrastructure managers

2.2.1 General requirements

2.2.1.1 The infrastructure manager shall control the risk of low adhesion between the wheels and the rail to a level that is as low as reasonably practicable.

2.2.1.2 The infrastructure manager shall identify sites where low adhesion may occur.
2.2.1.3 The infrastructure manager shall publish in the sectional appendix details of high risk sites.

2.2.2 Assessment of risks

2.2.2.1 Infrastructure managers shall lead an assessment to determine the risks involved where a site of low adhesion is identified.

2.2.3 Actions to be taken when low or exceptionally poor rail-head conditions have been reported at a location not having a site specific action plan

2.2.3.1 Infrastructure managers shall immediately advise the railway undertakings concerned when low or exceptionally poor rail-head conditions have been reported or become evident.

2.2.3.2 Infrastructure managers shall advise railway undertakings:

   a) What remedial action has been taken at the sites where low or exceptionally poor rail-head conditions have been reported
   
   b) The effectiveness of the remedial action taken.

2.2.3.3 Infrastructure managers shall review the results of the site assessment and the remedial action taken to determine if a site specific action plan needs to be developed.

2.3 Requirements for railway undertakings

2.3.1 Railway undertakings responsibilities

2.3.1.1 Railway undertakings shall advise the infrastructure manager immediately when the process of urgent advice to drivers of low adhesion is introduced.

2.3.1.2 Railway undertakings shall obtain the views of drivers on the effectiveness of action taken at sites of low adhesion and pass these to the infrastructure manager for inclusion in the review of any site specific action plans.
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Part 3 Application of this document

3.1 Application - infrastructure managers
3.1.1 Scope
3.1.1.1 The requirements of this document apply to all those whose duties include the process for identifying sites of low adhesion between the wheel and the rail, for the liaison and creation of plans to deal with low adhesion and the response to, and communication of, low adhesion sites to drivers and others involved in managing the risk from low adhesion.

3.1.2 Exclusions from scope
3.1.2.1 There are no exclusions from the scope specified in 3.1.1 for infrastructure managers.

3.1.3 General compliance date for infrastructure managers
3.1.3.1 This Railway Group Standard comes into force and is to be complied with from 04 April 2009, except as specified in 3.1.4. Where the dates specified in 3.1.4 are later than the above date, this is to allow infrastructure managers sufficient time to achieve compliance with the specified exceptions.

3.1.3.2 After the compliance dates or the date by which compliance is achieved if earlier, infrastructure managers are to maintain compliance with the requirements set out in this Railway Group Standard. Where it is considered not reasonably practicable to comply with the requirements, authorisation not to comply should be sought in accordance with the Railway Group Standards Code.

3.1.4 Exceptions to general compliance date
3.1.4.1 There are no exceptions to the general compliance date specified in 3.1.3 for infrastructure managers.

3.2 Application - railway undertakings
3.2.1 Scope
3.2.1.1 The requirements of this document apply to all those whose duties include the process for identifying sites of low adhesion between the wheel and the rail, for the liaison and creation of plans to deal with low adhesion and the response to, and communication of, low adhesion sites to drivers and others involved in managing the risk of low adhesion.

3.2.2 Exclusions from scope
3.2.2.1 There are no exclusions from the scope specified in 3.2.1 for railway undertakings.

3.2.3 General compliance date for railway undertakings
3.2.3.1 This Railway Group Standard comes into force and is to be complied with from 04 April 2009, except as specified in 3.2.4. Where the dates specified in 3.2.4 are later than the above date, this is to allow railway undertakings sufficient time to achieve compliance with the specified exceptions.

3.2.3.2 After the compliance dates or the date by which compliance is achieved if earlier, railway undertakings are to maintain compliance with the requirements set out in this Railway Group Standard. Where it is considered not reasonably practicable to comply with the requirements, authorisation not to comply should be sought in accordance with the Railway Group Standards Code.
3.2.4 Exceptions to general compliance date

3.2.4.1 There are no exceptions to the general compliance date specified in 3.2.3 for railway undertakings.

3.3 Health and safety responsibilities

3.3.1 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.
Definitions

Low Adhesion
The level of adhesion between the wheel and the rail that has the potential to extend the braking distance beyond that required under normal conditions.

Exceptionally poor rail head conditions
Conditions likely to cause more than the anticipated difficulties in stopping at a location listed in the Sectional Appendix.

Site Specific Action Plan
A plan developed jointly by infrastructure managers and railway undertakings to mitigate the risks arising from low rail-head adhesion conditions. The plan is retained by the infrastructure manager.

High Risk Site
A site identified by use of a risk assessment model which is designed to factor route information and historical data into a spreadsheet and, by a process of scoring, identify high risk locations requiring site specific action plans.

Urgent Advice
The process used by railway undertakings to advise drivers under their control of urgent operational requirements that have recently been published.
Low Adhesion between the Wheel and the Rail – Managing the Risk

References

The Catalogue of Railway Group Standards and the Railway Group Standards CD-ROM give the current issue number and status of documents published by RSSB. This information is also available from www.rgsonline.co.uk.

Other relevant documents

Railway Group Standards

GE/RT8000 Rule Book
GM/RT2461 Sanding Equipment Fitted to Multiple Units and On-Track Machines

Other references

Safe Movement of Trains (Railway Safety Publication 3) (edition 2, 2007)
Low Adhesion between the Wheel and the Rail - Managing the Risk

Definitions

Relevant definitions are given in Annex A, and are not reproduced here.
Low Adhesion between the Wheel and the Rail -
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References

The Catalogue of Railway Group Standards give the current issue number and status of documents published by RSSB. This information is also available from www.rssb.co.uk/railway-group-standards

RGSC 01  Railway Group Standards Code
RGSC 02  Standards Manual

Documents referenced in the text

Railway Group Standards

GERT8040  Low Adhesion between the Wheel and the Rail – Managing the Risk
(Ceases to be in force on 04 March 2017)

Technical Specifications for Interoperability