

Defective On-Train Equipment

Synopsis

This document mandates the requirements relating to the production of contingency plans, which have to be applied when **on-train equipment** becomes **defective**. It applies to all trains being brought into **service**, and to those in **service**, on Network Rail managed infrastructure.

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Content approved by:

Multifunctional Standards Committee on 13 November 2007

Authorised by RSSB on 05 December 2007

Published by:

**Rail Safety and Standards Board
Evergreen House
160 Euston Road
London NW1 2DX**

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Issue record

Issue	Date	Comments
One	June 1998	Rapid Response, replacement of Group Standard GO/OT0013
Two	February 1999	Amendments following consultation
Three	August 2000	Amendment following further review and consultation
Four	December 2004	Updated to reflect new technology and replaces issue three
Five	April 2008	Revised as part of the Strategy for Standards Management. Replaces issue four.

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

Superseded documents

The following Railway Group documents are superseded, either in whole or in part as indicated:

Superseded documents	Sections superseded	Date when sections are superseded
GO/RT3437 issue four	All sections	07 June 2008

GO/RT3437 ceases to be in force and is withdrawn as of 07 June 2008.

Supply

Controlled and uncontrolled copies of this Railway Group Standard may be obtained from the Corporate Communications Department, Rail Safety and Standards Board, Evergreen House, 160 Euston Road, London NW1 2DX, telephone 020 7904 7518 or e-mail enquiries@rssb.co.uk. Railway Group 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 requirements for the production of specific contingency plans which have to be applied when **on-train equipment** becomes **defective** and, in its **defective** state, could result in increased risk to safe interworking, the safety of passengers or the railway workforce. It applies to all trains being brought into **service**, and to those in **service**, on Network Rail managed infrastructure.
- 1.1.2 On-track plant not permitted to be moved or operated on the mainline railway outside possessions is outside the scope of GO/RT3437 and the associated RACoP GO/RC3537.

1.2 Introduction

1.2.1 Background

- 1.2.1.1 The requirements of this document are based on the need for railway undertakings to produce and publish **defective on-train equipment** (DOTE) contingency arrangements for trains affected by specified **on-train equipment** faults and breakdowns. The DOTE contingency plans are reviewed and monitored by all affected railway undertakings. Infrastructure managers will be required to review DOTE contingency plans submitted to them and given the opportunity to make comments if they have any. Infrastructure managers will need to have reviewed DOTE contingency plans in order for them to inform railway undertakings of any infrastructure changes that might affect the plans.
- 1.2.1.2 Each measure in this Railway Group Standard states what railway undertakings and infrastructure managers are required to do as a result of an interface.
- 1.2.1.3 The term 'infrastructure managers' includes those responsible for the management of stations.
- 1.2.1.4 This is a high-level document that is generally aimed for use by Railway Group Member Standards Managers; other interested parties may find it useful for information purposes.
- 1.2.1.5 The detailed requirements for front line staff are located in GE/RT8000 Rule Book.

1.2.2 Principles

- 1.2.2.1 Trains should not operate with **defective on-train** safety systems, **equipment** or components unless measures have been taken to enable consequential risks to be controlled.
- 1.2.2.2 **On-train** safety systems, **equipment** or components should be identified, and procedures should be in place to control risks if such systems, **equipment** or components become **defective**. These procedures should take into account the routes over which trains operate (including station interface arrangements) and should be established following liaison and discussions between the railway undertakings and infrastructure managers concerned.

1.2.3 Related requirements in other documents

- 1.2.3.1 There are related requirements in the following Railway Group documents at the time of publication:
 - GE/RT8000 Rule Book modules AC3, TW1, TW2, TW5
 - GM/RT2466 Railway Wheelsets

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1.2.4 Supporting documents

1.2.4.1 The following Railway Group document supports this Railway Group Standard:

GO/RC3537 RSSB Recommended Code of Practice issue three.

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Part 2 Requirements for **defective on-train equipment (DOTE)**

2.1 Responsibilities of infrastructure managers

- 2.1.1 Infrastructure managers shall review and comment on a draft DOTE contingency plan submitted to them by railway undertakings.
- 2.1.2 Infrastructure managers shall inform railway undertakings of any changes to facilities, either temporary or permanent, that will affect the detraining of passengers at stations identified in a published DOTE contingency plan.

2.2 Responsibilities of railway undertakings

2.2.1 Requirement for the production of a contingency plan for **defective on-train equipment**

- 2.2.1.1 Railway undertakings shall produce and publish a DOTE contingency plan that describes the actions to be taken when any item of **on-train equipment** as listed in Appendix A of this document becomes **defective**.

2.2.2 Requirement for the distribution of draft and published DOTE contingency plans

- 2.2.2.1 Railway undertakings shall distribute a copy of their respective DOTE contingency plan, in draft when they are in development, and in final published format to the following:
 - a) the infrastructure manager responsible for the mainline railway
 - b) infrastructure managers responsible for stations where a DOTE contingency plan states that passenger detrainments are permitted
 - c) other railway undertakings affected by the operation of a DOTE contingency plan.

2.2.3 Requirement to monitor and amend a published DOTE contingency plan

- 2.2.3.1 Railway undertakings shall monitor the effectiveness of a published DOTE contingency plan in order to identify any shortcomings.
- 2.2.3.2 Railway undertakings shall amend and update their published plan if required as a result of DOTE contingency plan monitoring.

2.2.4 Requirement to review DOTE contingency plans

- 2.2.4.1 Railway undertakings shall review their published DOTE contingency plan whenever the following occur:
 - a) changes are made to routes over which they operate
 - b) changes to the train **service** pattern or the level of train **service** are made that affect a published DOTE contingency plan
 - c) changes are made to their rolling stock fleet
 - d) modifications, additions and/or withdrawals are made to **on-train equipment**
 - e) changes are made to the rolling stock maintenance arrangements that affect a published DOTE contingency plan
 - f) changes are made to facilities, either temporary or permanent, at stations identified for the detraining of passengers in a published DOTE contingency plan.

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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 infrastructure managers' staff who deal with the application and monitoring of railway undertakings' **defective on-train equipment** contingency plans.

3.1.2 Exclusions from scope

3.1.2.1 There are no exclusions from the scope specified in clause 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 07 June 2008, except as specified in section 3.1.4. Where the dates specified in section 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 clause 3.1.3 for infrastructure managers.

3.2 Application - railway undertakings

The requirements of this document apply to all staff that deal with the application and monitoring of **defective on-train equipment** contingency plans.

3.2.1 Scope

3.2.1.1 The requirements of this document apply to all railway undertakings' staff who deal with the application and monitoring of **defective on-train equipment** contingency plans.

3.2.2 Exclusions from scope

3.2.2.1 There are no exclusions from the scope specified in clause 3.2.3 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 07 June 2008, except as specified in section 3.2.4. Where the dates specified in section 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.

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3.2.4 Exceptions to general compliance date

- 3.2.4.1 There are no exceptions to the general compliance date specified in clause 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.

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Appendix A List of On-Train Equipment

The content of this appendix is mandatory and details the minimum list of on-train equipment for which DOTE contingency plans shall be produced:

Automatic brake systems

Automatic Dropping Device (ADD)

Automatic Train Protection (ATP)

Automatic Warning System (AWS)

Bodyside windows

Cab heating/cooling equipment

Doors (external)

Driver Reminder Appliance (DRA)

Driver's Safety Device (DSD)

Driving cab windscreens

Emergency Bypass Switch (EBS)

Fire detection systems

Headlights

Hot axle boxes

Hydraulic buffers

Lifeguards

Locked wheels (including dragging brakes, wheel flats and shifted tyres)

On-Train Data Recorders (OTDR)

On-train emergency equipment (including fire extinguishers, detonators, track circuit operating clips, ladders, first aid kits, etc, and any other equipment specified in the instructions relating to the train concerned)

Passenger Communication Apparatus (PCA)

Public Address system (PA)

Sanding equipment (that assists braking)

Selective Door Opening facility (SDO) – on-train and balise-driven systems

Speedometer

Tail lamps

Tilt Authorisation and Speed Supervision system (TASS) (tilting trains only)

Track Circuit Actuators (TCA)

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Traction Interlock Switch (TIS)

Train lighting (internal)

Train Protection and Warning System (TPWS)

Train radio including:

- a) Cab Secure Radio **equipment** (CSR)
- b) National Radio Network (NRN)
- c) Radio Electronic Token Block (RETB) **equipment**

Tripcocks

Vigilance **equipment**

Warning horn

Wheel Slide Protection (WSP)

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Definitions

No definitions are required for this document.

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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.

Documents referenced in the text

None

Other relevant documents

Railway Group Standards

GE/RT8000 Rule Book modules AC3, TW1, TW2, TW5

GM/RT2466 Railway Wheelsets

GO/RC3537 Recommendations for [Defective On-Train Equipment](#)