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Published by:

**RSSB
Block 2
Angel Square
1 Torrens Street
London
EC1V 1NY**

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RIS-2703-RST
Rail Industry Standard for Driver Only Operated On-train
Camera / Monitor Systems
Issue One: June 2014
Rail Industry Standard

Rail Industry Standard for Driver Only Operated On-train Camera / Monitor Systems

Issue record

Issue	Date	Comments
One	June 2014	The contents of this document contains requirements and guidance for on-train camera / monitor systems (OTCM systems) associated with driver only operation of passenger (DOO(P)) trains.

Superseded or replaced documents

This Rail Industry Standard does not supersede or replace any other Railway Group documents.

Supply

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Rail Industry Standard for Driver Only Operated On-train Camera / Monitor Systems

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Rail Industry Standard for Driver Only Operated On-train Camera / Monitor Systems

Part 1 Introduction

1.1 Purpose of this document

- 1.1.1 This document provides a standard for on-train camera / monitor system (OTCM system) associated with driver only operation of passenger (DOO(P)) trains. The DOO(P) OTCM system is provided to assist the driver whilst undertaking the train safety check prior to train dispatch from a station and whilst departing from the platform. This document complements the general passenger train dispatch and platform safety requirements set out in RIS-3703-TOM.

1.2 Background

- 1.2.1 The DOO(P) OTCM system is a combination of dedicated cameras that are mounted on each vehicle bodyside used in conjunction with monitors fitted inside the active driving cab.
- 1.2.2 The equipment covered by this document is intended to be operated as a self-contained system with no interaction with systems mounted on the station platform. The DOO(P) OTCM system is outside the scope of Railway Group Standards. For this reason DOO(P) OTCM systems have been excluded from GE/RT8060 issue two.
- 1.2.3 This document is applicable to vehicles typically designed with 1/3 and 2/3 door spacing. The rail industry is currently evaluating possible application of DOO(P) OTCM systems to vehicles designed with access doors close to the vehicle ends. When this work is complete it is intended that this document will be revised to include these vehicles.

1.3 Application of this document

- 1.3.1 A member of RSSB may choose to adopt all or part of this document through company procedures or contract conditions. Where this is the case the member of RSSB will specify the nature and extent of application.
- 1.3.2 Specific compliance requirements and dates have therefore not been specified since these will be the subject of the internal procedures or contract conditions of the companies which choose to adopt this standard.

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1.5 The structure of this document

- 1.5.1 This document is set out as a series of requirements, in some cases followed by relevant guidance. The guidance is indicated by prefixing the paragraph number with the letter 'G'.

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1.7 Approval and authorisation of this document

- 1.7.1 The content of this document was approved by Rolling Stock Standards Committee on 14 February 2014.
- 1.7.2 This document was authorised by RSSB on 24 April 2014.

Rail Industry Standard for Driver Only Operated On-train Camera / Monitor Systems

Part 2 On-train Camera / Monitor System for Train Dispatch

2.1 DOO(P) OTCM system general requirements

- 2.1.1 The DOO(P) OTCM system shall enable the driver to visually detect persons or objects that are anywhere within the train dispatch corridor.
- 2.1.2 The DOO(P) OTCM system shall provide a view of the train dispatch corridor parallel to the train body that encompasses:
- a) The full length of the train.
 - b) The platform from the platform edge back to the yellow warning line. In the absence of a yellow warning line at least 1500 mm adjacent to the passenger bodyside entrances.
 - c) At least the height of the train doors.
- 2.1.3 The core technical requirements for the DOO(P) OTCM system are set out in Part 3.
- 2.1.4 Additional optional interfaces between the DOO(P) OTCM system with other on-board systems are set out in Part 4.
- 2.1.5 The performance assessment of the DOO(P) OTCM system is set out in Part 5.
- 2.1.6 The DOO(P) OTCM system shall enable the driver to view the train dispatch corridor when the train is in the platform under a range of external lighting levels from full daylight (sunlight) down to the minimum illumination at station platforms intended to be used with DOO of passenger trains.

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- G 2.1.6.1 The risk area for train dispatch is along the whole length of the train, not just in the vicinity of the external vehicle doors. The view provided by the DOO(P) OTCM system permits the driver to visually detect and assess the train dispatch risks for persons or objects alongside the vehicle or the space between adjacent vehicles.
- G 2.1.6.2 Blind spots alongside the vehicles, particularly on curved platforms, can prevent the driver from viewing the full train dispatch corridor. A compatibility assessment of blind spots will identify those station platforms where there is a risk to the DOO(P) train dispatch.
- G 2.1.6.3 Historically, the minimum spacing of the yellow warning line from the edge of the platform was 1000 mm. GI/RT7016 now sets the spacing of the yellow warning line from the edge at 1500 mm. The 1500 mm recommended distance at the doorways provides coverage of passenger movement away from and towards the doors.
- G 2.1.6.4 On-train systems are fitted to indicate that the train doors are fully closed and locked before departure. However, these door detection systems do not reliably detect clothing of a person standing on the platform caught in the door. The DOO(P) OTCM system provides a visual indication to the driver to help mitigate against this risk.
- G 2.1.6.5 The alignment of bright light sources and the direction the sun travels could adversely affect the DOO(P) OTCM system operation, for example by glare. A compatibility assessment undertaken at those station platforms where it is intended to use the DOO(P) OTCM system provides information to determine if there is a risk at these locations.