

TECHNICAL INSTRUCTION

TI 011
Issue 4
22/09/2011
Page 1 of 5



NETWORK RAIL - SIGNAL ENGINEERING Post Cat 'A' SPAD Signal Sighting Committees

Relevant Standard: GO/RT3119, GE/RT8037, NR/L1/OPS/010, NR/L2/SIG/10157

This TI supports the mandatory requirements of NR/L1/OPS/010 in respect of the action to be taken by Signal Sighting Engineers following a Category 'A' SPAD.

Purpose

The purpose of this Technical Instruction is so that the requirements placed on the Signal Sighting Engineer following a Category 'A' SPAD are defined and implemented.

Scope

This instruction applies to Signal Sighting Committees held as the result of a Category A SPAD at a signal or notice board/sign acting as a signal.

Abbreviations & Definitions

ERTMS – European Rail Traffic Management System

MRT - Minimum Reading Time

MOM - Mobile Operations Manager

Signal – An active or passive device which gives train drivers instruction to stop, or advises of a stopping point under signalling systems such as ERTMS. Can include conventional colour light signals, mechanical signals & notice boards/signs.

SPAD – Signal Passed At Danger

SSC - Signal Sighting Committee

Compliance Requirements

This TI is mandatory and shall be complied with from Date of publication.

Introduction

The Signal Sighting Engineer shall arrange for a SSC to be convened to assist the investigation of every Category A SPAD incident, with the following specific exceptions:-

- a) One was convened following a previous SPAD incident at that signal and all the following apply:
 - I. Its report is comprehensive and is available to the investigators.
 - II. The investigators are satisfied that all the factors relevant to the latest SPAD incident were considered.
 - III. The investigators are satisfied that no change has taken place to the signal or at its location, which could affect those factors.

- b) The train was wrongly authorised to pass the signal at danger after coming to a stand at the signal.

The above shall be agreed by the Signal Sighting Engineer, a Senior Operations Manager and the Train Company concerned.

The lead Investigator shall document the decision not to convene a SSC, and keep the decision details with the SPAD incident investigation report to be published with the formal investigation report.

Originator's Details:-

David Marriott

Network Rail

david.marriott@networkrail.co.uk

PUBLISHED UNDER NR/L2/SIG/11120

TECHNICAL INSTRUCTION

TI 011

Issue 4

22/09/2011

Page 2 of 5

[NR/L1/OPS/010](#) Issue 12 requires signal engineering to maintain a process for investigation of Cat A SPADs. There is a two-stage approach to signal sighting. A Level 1 SSC, which can be office based, is held to identify whether the infrastructure had any influence on the SPAD. A Level 2 SSC is held where the Level 1 SSC has identified that infrastructure issues may have had an influence on the SPAD or the Level 1 SSC is unable to reach a firm conclusion. A Level 2 exemption may be granted where the risk ranking process identifies that the SPAD risk is low.

The Signal Sighting Engineer shall arrange for the checking of previous signalling records of the signal to be sighted, taking into account any renumbering of the signal that may have taken place since it was commissioned.

Level 1 SSC

The Signal Sighting Engineer shall arrange a Level 1 SSC which shall be undertaken using the form contained in Appendix A. It should be convened by the most effective method for gathering and discussing the relevant data expeditiously. It may be conducted by office meeting, or phone/ e-mail. A Level 1 SSC may be combined with a Level 2 SSC.

Membership will be in accordance with [NR/L2/SIG/10157](#).

The requirement to convene a SSC, following a Category 'A' SPAD, may be concluded at Level 1 in the following circumstances:

- a) Where the Level 1 SSC determines that there are no infrastructure related issues associated with the Category A SPAD incident.
- b) Scenarios where a previous post-SPAD SSC has been held recently.
- c) Where the signal has been commissioned within the previous 12 months, provided that the Level 1 SSC is satisfied that the existing or planned configuration of the signal adequately addresses any infrastructure issues indicated in the SPAD incident.
- d) Where the risk ranking process identifies that the SPAD risk is low and written exemption is granted to the Signal Sighting Engineer.

If, however, it is deemed necessary to convene a Level 2 SSC, then the Level 1 SSC will include within the form contained in Appendix A, the remit for the Level 2 SSC based on their findings and the requirements of [GE/RT8037](#) and [NR/L2/SIG/10157](#). The remit shall be such that all risk factors that could contribute to, or result from, a SPAD incident are considered.

Level 2 SSC

The report of a Level 2 SSC shall generally follow the following structure:

- a) Specific data:
 - Signal No. (or equivalent)
 - Location
 - Date of SSC
 - Date & time of Cat A SPAD
- b) Track diagram/sketch showing relevant signals
- c) Sighting and Readability
- d) Conclusions
- e) Recommendations, if any.
- f) Issues Identified for Further Investigation
- g) Non Compliance (with standards to which the signal was originally designed)
- h) Other Issues
- i) Copy of original Signal Sighting Form (including MRT and Obscuration forms if applicable). Note- If this cannot be retrieved and the signal is multi-SPAD, then you should create a new form in accordance with the template given in [NR/L2/SIG/10157](#). If the signal is not multi-SPAD you are recommended to create a new form.
- j) Photographs
- k) List of attendees
- l) Checked by competent person
- m) Approval by Signal & Telecoms Maintenance Engineer