

NOTICE BOARD

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NETWORK RAIL - SIGNAL ENGINEERING

Level Crossing Road Traffic Lights – synchronisation of flashing red aspects

Purpose

To brief the outcome of an investigation into a report of level crossing road traffic light signals, commonly known as “Wig Wags” not flashing in synchronisation.

Scope

Applies to “Wig Wags” used at level crossings as required by [Traffic Signs Regulations and General Directions](#). (TSRGD).

Applies to railway staff that are responsible for specifying, inspecting or maintaining level crossings.

Background

On Wednesday 22nd July 2015 it was reported that the Wig-Wags at a number of level crossings on the GNGE line re-signalling project were not performing as normally expected. The information was logged as a Close Call, as requested by the reporter who works under contract to Network Rail.

Figure 1 shows pairs of Wig-Wag signals not flashing in synchronisation i.e. Left Hand light and Left Hand light.



Figure 1

Abbreviations & Definitions

GNGE Great Northern and Great Eastern (re-signalling project title)

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LED Light Emitting Diode
Wig-Wag Road Traffic Light signal found at level crossings, as required by TSRGD.
TSRGD Traffic Sign Regulations and General Direction, 2002
WESTRACE Signalling control product of Siemens Rail Automation

Summary of the Investigation

It was determined that although the appearance was not in accordance with historic custom, the perception by a road vehicle driver would not give rise to an immediate safety risk.

Action was initiated with the GNGE Project to investigate. The investigation concluded that the non-synchronised presentation of lights is compliant with statutory or Regulatory requirements.

The phenomenon may be explained by differences between Westrace controlled and traditional relay circuit controlled road traffic lights. The former are driven by separate electronic flasher circuits, whereas the latter are driven from a single flasher relay.

A small number of level crossing specialists were consulted and no specific deviation from any known mandatory requirements was evident.

Conclusion of the Investigation

The conclusion drawn from the investigation is that the performance of the lights meets known requirements and therefore no further immediate action is required. As a result, the Close Call was closed.

As part of a separate initiative the Head of Level Crossing Engineering intends to commission an investigation into the optimum flash rate for Wig-Wags specifically in relation to the use of LED lights.

Action Required

No action is required to change the infrastructure.

Should a report be received similar to the one described, the reporter should be referred to this Notice Board, to the effect that the behaviour is both normal and compliant with all legal and company requirements currently published and in force.

Staff to be Briefed

Role	Responsible for Briefing
Route Asset Managers [Signalling]	Head of Level Crossing Engineering
Head of Level Crossing Safety & Risk	Head of Level Crossing Engineering
Level Crossing Managers	Head of Level Crossing Safety & Risk