

Recommendation(s) Status: Near-miss at Butterswood level crossing, North Lincolnshire

This report is based on information provided to the RAIB by the relevant safety authority or public body.

The status of implementation of the recommendations, as reported to us, has been divided into six categories:

Key to Recommendation Status

Implemented:	All actions to deliver the recommendation have been completed.
Implemented by alternative means:	The intent of the recommendation has been satisfied in a way that was not identified by the RAIB during the investigation.
Implementation ongoing:	Work to deliver the intent of the recommendation has been agreed and is in the process of being delivered.
In-progress:	The relevant safety authority has yet to be satisfied that an appropriate plan, with timescales, is in place to implement the recommendation; and work is in progress to provide this.
Non-implementation:	Regulation 12(2)(b)(iii) = recommendation considered and no implementation action to be taken.
Awaiting response:	Awaiting initial report from the relevant safety authority or public body on the status of the recommendation.

RAIB concerns on actions taken by organisations in response to recommendations are reflected in this report and are indicated by one of the following:

-  The red triangle shows recommendations where the RAIB has concerns that no actions have been taken in response to a recommendation.
-  The blue triangle shows recommendations where the RAIB has concerns that the actions taken, or proposed, are inappropriate or insufficient to address the risk identified during the investigation.
-  The white triangle shows recommendations where the RAIB notes substantive actions have been reported, but the RAIB still has concerns.

Note: The tables which follow, report the status of recommendations on 31 December 2015. In some other cases the end implementer has already sent information to the relevant safety authority about the actions it has taken, or proposes to take and the safety authority is considering whether it is satisfied that those actions and the associated timescales are accepted.

Number/ Date/ Report No/ Inv Title / Current Status	Safety Recommendation	Summary of current status (based on ORR's report to RAIB)
<p>1 25/06/2013 12/2014</p> <p>Near-miss at Butterswood level crossing, North Lincolnshire</p> <p>Status: Implemented</p>	<p>The intent of this recommendation is to provide a positive indication to train drivers when automatic locally monitored level crossings have failed to operate for the approaching train.</p> <p>Network Rail, in consultation with RSSB, should conduct a human factors and technical review of the indications displayed at driver's crossing indicators provided on the approach to automatic locally monitored level crossings, and evaluate alternative means (eg audible and visual) of indicating to train drivers that the level crossing has not operated as intended. A time-bound plan for improvements arising from the review should be developed using a risk-based approach (paragraph 101a).</p>	<p>ORR has reported that Network Rail has reported that it has completed actions taken in response to this recommendation. ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
<p>2 25/06/2013 12/2014</p> <p>Near-miss at Butterswood level crossing, North Lincolnshire</p> <p>Status: In-progress</p>	<p>The intent of this recommendation is to improve the reliability of all power supplies (including battery back-up arrangements) at automatic locally monitored level crossings.</p> <p>Network Rail should review the arrangements in place at all types of automatic locally monitored level crossings, and make improvements to the reliability of those crossings. The review, and associated improvements, should include (but not be limited to):</p> <p>a. locations where parallel protective systems exist (such as multiple earthing systems combined with RCD protection) where their presence can lead to unnecessary loss of the main network power supply to the level crossing;</p> <p>b. the plans in place to ensure that UPS systems maintain adequate performance throughout their life (including plans to replace UPS battery systems during the life of the UPS system); and</p> <p>c. understanding the age of UPS systems in use, and the manufacturer's life expectancy of those assets (paragraphs 101b and 102b).</p>	<p>ORR has reported that Network Rail has outlined the actions to be taken in response to the recommendation. ORR is seeking further information including a time bound plan for implementation.</p>
<p>3 25/06/2013 12/2014</p> <p>Near-miss at Butterswood level crossing, North Lincolnshire</p> <p>Status: Implemented</p>	<p>The intent of this recommendation is for Network Rail to be able to identify level crossings that have suffered a power supply failure so that prompt action can be taken to manage the consequences of the failure including consideration of the benefits of recent technological developments that allow remote condition monitoring at reasonable cost.</p> <p>Network Rail should evaluate the practicality of remote condition</p>	<p>ORR has reported that Network Rail has reported that it has completed actions taken in response to this recommendation. ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>

monitoring of the power supply system, and key sub-systems whose failure can have the same effect as loss of power supply, at all locally monitored level crossings, so that prompt action can be taken to manage the failure (such as telling train drivers that the crossing has failed and arranging for technical staff to attend the level crossing to investigate the failure) (paragraph 101c).

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North Lincolnshire
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The intent of this recommendation is for First TransPennine Express to identify and implement changes where necessary to its briefing methods in order to reduce the risk of drivers making errors at key locations such as locally monitored crossings.

First TransPennine Express should review and enhance its briefing techniques and guidance material for train drivers (paragraph 102c):

- a. to explain the role of the driver at locally monitored crossings;
- b. to ensure that it properly reflects the operation of key infrastructure assets such as level crossings (including revisions to its description of the arrangements at automatic locally monitored level crossings, beyond the level of detail described in the railway rule book);
- c. to allow its train drivers to practise dealing with unannounced level crossing failures, including, for example, the use of its train driving simulator or video-based hazard perception exercises;
- d. by using focused, risk-based, presentation material for briefing operational staff (paragraph 103b); and
- e. by stating clearly the action drivers should take when passing the special speed restriction board of any locally monitored automatic level crossing, when a flashing red light is visible at the drivers crossing indicator (paragraph 103b).

Note: Recommendation 4 may also apply to other train operators.

ORR has reported that First TransPennine Express has reported that it has taken actions in response to this recommendation. ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.