

Recommendation(s) Status: Freight train derailment near Gloucester, 15 October 2013

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 eight 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.
Insufficient response:	The end implementer has failed to provide a response; or has provided a response that does not adequately satisfy ORR that sufficient action is being taken to properly consider and address a recommendation.
Progressing:	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.
Other Public Body or Authority	The recommendation is also addressed to another public body or authority.
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 15/10/2013 20/2014</p> <p>Freight train derailment near Gloucester</p> <p>Status: Implemented</p>	<p>The intent of the recommendation is to reduce the possibility of new track defects developing due to the installed drainage not preventing water ingress from the local water table, which could give rise to a risk of derailment.</p> <p>Network Rail should review the effectiveness of the drainage in the area where the train derailed (between 118 miles 60 chains and 118 miles 40 chains on the up main line between Lydney and Gloucester) to confirm if the work that was undertaken to improve the drainage, when the track was renewed in March 2014, will control the risk of water from the local water table affecting the track's vertical geometry and the recurrence of a cyclic top track defect (paragraphs 194a.i and 195a).</p>	<p>ORR has reported that Network Rail 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.</p>
<p>2 15/10/2013 20/2014</p> <p>Freight train derailment near Gloucester</p> <p>Status: Implemented</p>	<p>The intent of the recommendation is to reduce the risk of derailment from cyclic top track defects.</p> <p>Network Rail should revise its processes for the management of cyclic top track defects. It should:</p> <p>a) review the requirement that immediate action cyclic top track defects must be repaired within 36 hours to understand if it is feasible for an effective repair to be made in this timescale, and if not, mandate the actions that must be taken to mitigate the risk due to the cyclic top track defect until an effective repair can be planned and made (paragraph 194a.iv);</p> <p>b) provide guidance, which is briefed out to its track maintenance staff, on how to make effective repairs to cyclic top track defects. This guidance should tell track maintenance staff not to carry out manual repair work that is only aimed at breaking the cyclic top track defect into sections of track with poor vertical track geometry, unless the risk presented by the residual poor vertical track geometry is assessed and mitigating actions taken (such as the imposition of a speed restriction) (paragraph 194a.iv);</p> <p>c) review the adequacy of its processes for imposing and removing emergency speed restrictions applied for cyclic top track defects. This is to assure itself that there are adequate controls in place for the removal of cyclic top related speed restrictions. Such controls could include an assessment of the track's vertical geometry, carried out after trains have run over the repaired track, but before line speed is restored (paragraphs 194a.iv and 195b); and</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>

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**Summary of current status (based on ORR's report to
RAIB)**

d) have a process in place that raises the visibility of repetitive cyclic top track defects, so that senior management responsible for the local maintenance team are made aware of it and can monitor the actions being taken to address the cyclic top (paragraphs 195b and 207).

3 15/10/2013 20/2014
Freight train derailment near Gloucester

Status: Implemented

The intent of the recommendation is to enable maintenance staff to know if their repair work has been sufficiently effective to correct the reported track geometry defect.

Network Rail should provide its maintenance staff with a method of measuring repairs to vertical track geometry which provides early confirmation that the repairs undertaken have been effective (paragraph 194a.iii).

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.

4 15/10/2013 20/2014
Freight train derailment near Gloucester

Status: Implemented by alternative means

The intent of the recommendation is to provide maintenance staff with a way of making effective repairs to vertical track geometry faults on steel sleeper track.

Network Rail should investigate methods of making more effective repairs to vertical track geometry faults on steel sleeper track, especially if the underlying formation is poor or the ballast is contaminated. Any methods that are identified by this work should then be incorporated into procedures and Track Work Information Sheets, and briefed out to its track maintenance staff (paragraph 194a.ii)

ORR has reported that Network Rail has reported that it has completed the actions taken (by alternative means) in response to this recommendation. ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.

5 15/10/2013 20/2014
Freight train derailment near Gloucester

Status: Implemented

The intent of the recommendation is to ensure that when a vehicle's dynamic behaviour is assessed to identify whether its ride performance is compatible with the railway infrastructure in Great Britain (this may include infrastructure that does not comply with Technical Specifications for Interoperability), the susceptibility of its ride performance to track geometry with cyclic top is included in this assessment.

RSSB, in conjunction with Rolling Stock Standards Committee, should carry out a review to identify how a vehicle's response to regular changes in vertical track geometry should be assessed (ie a cyclic top assessment). RSSB should then propose changes to the standards which are used assess the compatibility of vehicle's ride performance with the railway infrastructure in Great Britain (at present this is Railway Group Standard GM/RT2141), which will implement the cyclic top assessment identified by the review. The proposed changes to the standards, as agreed by Rolling Stock Standards Committee, should then be implemented by RSSB by means of

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a time bound programme (paragraphs 194b.i, 194b.ii and 195c).

6 15/10/2013 20/2014
Freight train derailment near Gloucester

The intent of the recommendation is to remove or reduce the susceptibility of the IDA wagon's ride performance to dips in the track when in its tare or a partially laden condition.

ORR has reported that Direct Rail Services has outlined the actions to be taken in response to the recommendation. ORR is seeking further information.

Status: In-progress

Direct Rail Services should implement measures to reduce the susceptibility of the IDA wagon's ride performance to changes in vertical track geometry when in tare or a partially laden condition. This could be by means of either the introduction of operating restrictions or modifications to the wagon's suspension (paragraph 194b).

7 15/10/2013 20/2014
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The intent of the recommendation is to highlight the risk that a wagon may be susceptible to riding problems if it is designed with a bogie centre spacing distance that is the same as a wavelength commonly associated with cyclic top track defects.

ORR has reported that RSSB 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.

Status: Implemented

RSSB, in conjunction with Rolling Stock Standards Committee, should propose that guidance on the design of freight wagons in document GM/GN2688 is amended, to explain that as well as two-axle wagons, if a wagon is designed with a bogie centre spacing that matches a wavelength commonly associated with cyclic top, it may be susceptible to poor ride on jointed track and cyclic top (paragraph 196c).