

## Recommendation(s) Status: Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe

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

<b>Implemented:</b>	All actions to deliver the recommendation have been completed.
<b>Implemented by alternative means:</b>	The intent of the recommendation has been satisfied in a way that was not identified by the RAIB during the investigation.
<b>Implementation ongoing:</b>	Work to deliver the intent of the recommendation has been agreed and is in the process of being delivered.
<b>In-progress:</b>	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.
<b>Non-implementation:</b>	Regulation 12(2)(b)(iii) = recommendation considered and no implementation action to be taken.
<b>Awaiting response:</b>	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 latest report from the relevant safety authority or public body)
<p>1            25/01/2008    10/2009</p> <p>Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe</p> <p>Status: Implemented</p>	<p>Network Rail should provide further guidance in the track inspection handbook associated with work instruction NR/WI/TRK/001 on the actions to be taken when there are track geometry irregularities close to each other that can combine to increase the derailment risk. In particular, Network Rail should review the minimum action requirements in table 8 of NR/SP/TRK/001 for lateral alignment irregularities, and if appropriate, revise it to state the measures to be taken on discovery of severe lateral alignment irregularities close to other track geometry irregularities, with timescales for action.</p>	<p>Network Rail has reported that it has taken actions in response to this recommendation.</p> <p>ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
<p>2            25/01/2008    10/2009</p> <p>Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe</p> <p>Status: Implemented</p>	<p>Network Rail should revise NR/SP/TRK/001 to give guidance on appropriate measures to be taken on discovery of excessive cant with timescales for action.</p>	<p>Network Rail has reported that it has taken actions in response to this recommendation.</p> <p>ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
<p>3            25/01/2008    10/2009</p> <p>Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe</p> <p>Status: Implemented</p>	<p>Network Rail should investigate the reason why there is water underneath the down line's trackbed at Santon and implement an engineering solution to prevent the water from entering the track formation to an extent which can lead to a deterioration in track geometry.</p>	<p>Network Rail has reported that it has taken actions in response to this recommendation.</p> <p>ORR proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
<p>4            25/01/2008    10/2009</p> <p>Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe</p> <p>Status: Implemented</p>	<p>Network Rail should develop appropriate tools to analyse trends in track geometry recording systems in order to identify rapid deterioration in track geometry, with the information output from these tools provided to the local maintenance teams.</p>	<p>ORR reports that Network Rail has developed and are now implementing the Linear Asset Decision Support (LADS) tool, which is a track asset information service for decision support:</p> <ul style="list-style-type: none"> <li>- It calculates, consolidates, and geographically aligns key data from source systems</li> <li>- Current and historic track asset data is graphically presented, compared and analysed</li> <li>- Data sources include geographical, condition (track geometry recording, rail breaks/defects) and intervention history and planning</li> <li>- Deployed for desktop PCs and mobile devices.</li> </ul> <p>Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>

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5            25/01/2008    10/2009  Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe  Status: Implemented	Network Rail should provide their inspection and maintenance staff with a single source of information that allows the identification of localised areas where track quality is poor, and is repeatedly deteriorating, due to discrete track geometry faults. In particular, information about the detection, measurement, repair and post-repair inspection of discrete track geometry faults should be recorded, together with references to related work orders that are recorded on Ellipse.	ORR reports that Network Rail has addressed this Recommendation by implementation of a linear asset decision support (LADS) tool - see Rec 4. Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.
6            25/01/2008    10/2009  Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe  Status: Implemented	Network Rail should take measures to improve the accuracy of location information for track geometry faults recorded by all track geometry recording runs and inspection staff, and provide maintenance staff with the ability to use this information to precisely locate the identified faults.	ORR reports that Network Rail has fitted GPS to its track geometry measurement trains. The Immediate Action Reports produced from the trains show the GPS co-ordinates of geometry faults. Maintenance team leaders are now being provided with hand-held GPS devices that enable them to position themselves in the vicinity of the fault to an accuracy of 5-10 metres making the faults easier and quicker to locate on site. Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.
7            25/01/2008    10/2009  Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe  Status: Implemented 	Network Rail should implement processes to investigate and monitor the effectiveness of repairs to repetitive track geometry faults, so that when a track geometry fault recurs, the reason for it coming back can be established, an appropriate repair method can be chosen and monitoring can be carried out to determine whether the second attempt to repair it has been successful.	ORR has reported that (Dutyholder name) has reported that it has taken actions in response to this recommendation. ORR will continue to monitor implementation of this recommendation. \$W
8            25/01/2008    10/2009  Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe  Status: Implemented	Network Rail should brief out to existing permanent way staff, and include within the training syllabus for new permanent way staff, information which highlights the significance of water close to the track, or within the trackbed, and the importance of reporting this information.	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.
9            25/01/2008    10/2009  Derailment at Santon near Foreign Ore Branch Junction, Scunthorpe  Status: In-progress	Freightliner should assess the permissible level of offset load before the derailment risk criteria in the Railway Group Standard GM/RT2141, Resistance of Railway Vehicles to Derailment and Roll-Over, is exceeded, and should put processes in place to ensure that any bogie hopper wagon, such as the HHA wagon, with an offset exceeding the permissible level does not enter into traffic.	Freightliner report that they had made a proposal, via RSSB, for research to assess the inherent norm and deviation of lateral offset that is prevalent in UK train loading. This was considered by various committees at RSSB. These concluded that the limit valves within GM/RT 2141 include for lateral offset and that there was no business case for further investigation. The RAIB has expressed its concern to ORR that the risk identified by the investigation has yet to be addressed. The same risk was a factor the derailment at Duddeston in 2007 (ref. no. 16/2008). The ORR has advised RAIB that it recently held a meeting with Freightliner to review issues associated with offset loads (this is

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also relevant to Duddeston recommendation 5). RAIB is awaiting further information on the outcome of these discussions.