

## Recommendation(s) Status: Derailment of an empty passenger train at Paddington station, 25 May 2014




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

<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>Insufficient response:</b>	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.
<b>Progressing:</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>Other Public Body or Authority</b>	The recommendation is also addressed to another public body or authority.
<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 ORR's report to RAIB)
<p>1            25/05/2014    03/2015</p> <p>Derailment of an empty passenger train at Paddington Station</p> <p>Status: Implemented</p>	<p>The intent of this recommendation is for the load distribution to remain evenly spread across all wheels on Siemens Desiro vehicles following tyre turning or bogie replacement.</p> <p>Siemens' procedure for setting the vehicle ride heights after tyre turning or bogie replacement should be revised to reflect the original design intent, including the function of the anti-roll bars and the risks associated with incorrectly setting the anti-roll bar links. The revised procedure should also include checks of the bogie setup post-intervention to ensure that the wheel load distribution is maintained within Siemens' acceptable limit. These checks could be direct wheel load measurements, measurements of other indicators such as the Z1 dimensions or any other checks which positively confirm that the wheel load distribution has been maintained within Siemens' acceptable limit (paragraphs 129a, 130i, 130iii and 130iv).</p>	<p>ORR has reported that Siemens has reported that Siemens 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            25/05/2014    03/2015</p> <p>Derailment of an empty passenger train at Paddington Station</p> <p>Status: Implemented</p>	<p>The intent of this recommendation is for Siemens' maintenance staff to fully understand the role and importance of anti-roll bars.</p> <p>Siemens' training materials and competence assessments for technicians and supervisors should be revised to capture the function of anti-roll bars, their method of adjustment and the risks associated with incorrectly setting the anti-roll bar links (paragraph 130ii). Siemens should also make this information available to maintenance and overhaul contractors working on its behalf.</p>	<p>ORR has reported that Siemens 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>3            25/05/2014    03/2015</p> <p>Derailment of an empty passenger train at Paddington Station</p> <p>Status: Implemented</p>	<p>The intent of this recommendation is to ensure that other safety critical procedures used by Siemens to maintain its vehicles operating in the UK embrace the original design intent.</p> <p>Siemens should complete its review of the safety critical procedures used to maintain its vehicles operating in the UK to confirm that they meet the original design intent and are capable of being implemented by competent staff (paragraph 140). Based on the findings of this review, Siemens should make any necessary changes to the procedures and re-brief its maintenance staff (paragraph 132a).</p>	<p>ORR has reported that Siemens 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>4            25/05/2014    03/2015</p> <p>Derailment of an empty passenger train at Paddington Station</p> <p>Status: Implemented</p>	<p>The intent of this recommendation is for Siemens to ensure that safety critical maintenance and overhaul procedures do not undermine the design intent and import a risk.</p> <p>Siemens should review the effectiveness of its recently developed processes for ensuring that all necessary information</p>	<p>ORR has reported that Siemens 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>Note - ORR chose not to refer the recommendation to other</p>

**Number/ Date/ Report No/  
Inv Title / Current Status**

**Safety Recommendation**

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

from the design process is correctly incorporated in maintenance procedures and training materials (paragraphs 132a and 142). If found necessary, Siemens should update its processes and continue to monitor their effectiveness.

suppliers and manufacturers.

Note: this recommendation may also apply to other suppliers and manufacturers of rolling stock.

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5            25/05/2014    03/2015

Derailment of an empty passenger train at  
Paddington Station

Status: Implemented

The intent of this recommendation is for Network Rail to establish the reasons why the West Ealing depot failed to comply with Network Rail's own processes.

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.

Network Rail should review the supervision and self-assurance arrangements in place at West Ealing depot to identify any shortcomings which led to the non-compliances with mandated standards going unnoticed. Network Rail should then include any lessons learnt into its revised assurance framework (paragraphs 129b and 131).