

Recommendation(s) Status: Person trapped in train door at Jarrow station, Tyne & Wear Metro

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 latest report from the relevant safety authority or public body)
<p>1 12/04/2012 26/2012</p> <p>Person trapped in train door at Jarrow station, Tyne & Wear Metro</p> <p>Status: Implementation ongoing</p>	<p>The purpose of this recommendation is to reduce the number of deliberate door obstructions on the Tyne and Wear Metro network, by raising passenger awareness, thereby reducing the risk from future trap and drag incidents.</p> <p>DB Regio Tyne and Wear should:</p> <p>a. develop its current actions, reported at paragraph 77, to reduce the frequency of door obstruction by passengers into an ongoing long term strategy and implement this; and</p> <p>b. introduce a system of monitoring the frequency of door obstructions on its network, in order to check the efficacy of the measures implemented in (a) and to optimise the strategy where appropriate (paragraphs 71 and 75).</p>	<p>ORR has reported that DB Regio Tyne and Wear (DBTW) 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 12/04/2012 26/2012</p> <p>Person trapped in train door at Jarrow station, Tyne & Wear Metro</p> <p>Status: Implementation ongoing</p>	<p>The intent of this recommendation is that the reliability of the door control circuits on the TWM trains is increased in order to minimise the risk of a similar malfunction to that which occurred in this incident.</p> <p>DB Regio Tyne and Wear should identify ways to improve the reliability of the door obstruction detection and traction interlock systems, including consideration of improvements in:</p> <p>I design of the control circuitry;</p> <p>I ingress protection of the microswitches;</p> <p>I switch cleaning method;</p> <p>I replacement procedures;</p> <p>and implement identified improvements (paragraph 72).</p>	<p>ORR reports that DB Regio Tyne and Wear have implemented an engineering plan to address door reliability and has now implemented ways of improving the reliability of the door obstruction detection and traction interlock systems. There is still an outstanding action for the replacement of detection switches during phased maintenance and heavy door refurbishment. This is due for completion in December 2015. Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
<p>3 12/04/2012 26/2012</p> <p>Person trapped in train door at Jarrow station, Tyne & Wear Metro</p> <p>Status: Implemented</p>	<p>The intent of this recommendation is that the visibility of the platform / train interface at stations on the TWM is as clear as reasonably practicable and consistent with the dispatch arrangements for each station.</p> <p>DB Regio Tyne and Wear should:</p> <p>a. review the visibility of trapped passengers from driving cabs at stations on its network, including consideration of how lighting, shadows at different times of the day, colour of passenger's</p>	<p>ORR reports that DB Regio Tyne and Wear have reviewed the visibility of the platform train interface and has put in place a programme for improvements at a number of stations. 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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Safety Recommendation

**Summary of current status (based on latest report
from the relevant safety authority or public body)**

clothing and train paint schemes may adversely affect that visibility; and

b. implement identified improvements, to include consideration of realignment of platform mirrors and provision of additional CCTV monitors (paragraph 74).

4	12/04/2012	26/2012	<p>The intent of this recommendation is that the test method used for checking the door obstacle extraction forces is aligned with those specified in the relevant industry standards.</p> <p>DB Regio Tyne and Wear should change the test method it uses for checking compliance of its train doors against the obstacle extraction forces specified in Railway Group Standard GM/RT2473, so that it is also aligned with the requirements specified in BS EN 14752:2005 (paragraph 76).</p>	<p>ORR reports that DB Regio Tyne and Wear have provided new door gauges and that the work instruction for their use has been written, the RAIB therefore considers that the intent of the recommendation has been met. However, the RAIB notes that the ORR is currently discussing with DB Regio the measured pull out forces and the need for modifying the doors accordingly. ORR not content with duty-holder response, further engagement ongoing / proposed.</p>
5	12/04/2012	26/2012	<p>The intent of this recommendation is to clarify the test method used to measure the obstacle extraction force specified in Railway Group Standard GM/RT2473.</p> <p>RSSB should clarify the section in Railway Group Standard GM/RT2473 relating to the obstacle extraction force (section B6.3b) with respect to the geometry and material of the test obstacle and the direction of pull, and/or cross reference BS EN 14752 (paragraph 76).</p>	<p>RSSB has reported that it has taken actions in response to this recommendation. Office of Rail Regulation (ORR) proposes to take no further action unless they become aware that the information provided becomes inaccurate.</p>
