

## Recommendation(s) Status: Collision at New Addington on Croydon Tramlink

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            23/11/2005    11/2006</p> <p>Collision at New Addington on Croydon Tramlink</p> <p>Status: Implemented</p>	<p>Tram Operations Ltd should carry out a programme to re-train all their drivers on the necessity to use the hazard brake in an emergency. Training and routine on the necessity to use the hazard brake in an emergency. Training and routine assessments should include understanding and demonstration by the driver in the operation of the hazard brake. The process of 'feathering' to avoid the final jerk should be retained (paragraph 50).</p>	<p>Tram Operations Ltd have reported that they have 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            23/11/2005    11/2006</p> <p>Collision at New Addington on Croydon Tramlink</p> <p>Status: Implemented </p>	<p>Tramtrack Croydon Ltd should assess the possibility of moving signal KHD02 to a position at least 21 m from the fouling point, and if it is reasonably practicable should carry out that relocation (paragraph 54).</p>	<p>ORR reports that TCL reviewed the reasonable practicability of the proposed relocation of signal KHD02. Following this review no further action was taken. The RAIB remains concerned that no additional precautions have been taken to reduce the risk of collision in this single line section. \$</p>
<p>3            23/11/2005    11/2006</p> <p>Collision at New Addington on Croydon Tramlink</p> <p>Status: Implemented </p>	<p>Tramtrack Croydon Ltd should assess the possibility of fitting SPAS indicators to the King Henry's Drive to New Addington section thus making it similar to all other single track sections on the tramway. If Recommendation 2 has not been applied, Tramtrack Croydon Ltd should install SPAS indicators if it is reasonably practicable to do so (paragraph 56).</p>	<p>ORR reports that TCL assessed the possibility of providing a SPAS indicator and concluded that it was impracticable to do so. RAIB remains concerned that no additional precautions have been taken to reduce the risk of collision in this single line section.\$</p>
<p>4            23/11/2005    11/2006</p> <p>Collision at New Addington on Croydon Tramlink</p> <p>Status: Implemented</p>	<p>The Office of Rail Regulation (Her Majesty's Railway Inspectorate) should consider reviewing Railway Safety (Principles and Guidance), Part 2G "Guidance on Tramways" to include the provision of suitable over-run distances, and/or detection and warning systems at the design stage of tramway systems where they are a simple and cost effective means to mitigate against fouling point collisions at the entry to single line sections (paragraph 57).</p>	<p>ORR considered whether there was a case for the adoption of this recommendation. ORR have reported that the guidance on tramways is currently under review. However, it has concluded that the adoption of the recommendation is contrary to the principles of tramway operations. RAIB notes that ORR have considered the proposed enhancement of guidance in this area but is disappointed that no action is proposed</p>
<p>5            23/11/2005    11/2006</p> <p>Collision at New Addington on Croydon Tramlink</p> <p>Status: Implemented</p>	<p>Tram Operations Ltd should carry out a programme to remind all drivers on the importance of using the hazard warning lights whenever a potentially hazardous situation occurs. Training and routine assessments should include practice in the immediate use of hazard warning lights (paragraph 58).</p>	<p>Tram Operations Ltd 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>