

## Recommendation(s) Status: Derailment of a tram at East Croydon




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            17/02/2012    04/2013</p> <p>Derailment of a tram at East Croydon</p> <p>Status: Implemented by alternative means</p>	<p>The intention of this recommendation is to promote a review of the signalling and operational arrangements at East Croydon and to take any action needed to make them fit for purpose. London Tramlink should review the operational and signalling arrangements at East Croydon to consider whether undue reliance is being placed on the correct operation of track circuits. If found necessary:</p> <ul style="list-style-type: none"> <li>• additional measures to alert tram drivers to the stopping position in platforms should be provided (paragraph 69); and/or</li> <li>• the signalling and/or point control arrangements should be modified (paragraph 71).</li> </ul>	<p>ORR has reported that London Tramlink has reported that it has taken actions (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.</p>
<p>2            17/02/2012    04/2013</p> <p>Derailment of a tram at East Croydon</p> <p>Status: Implemented</p>	<p>The intention of this recommendation is to reduce the risk of rail head contamination affecting the correct operation of track circuits. This should include inspections immediately after events which could lead to accumulation of silt.</p> <p>London Tramlink should identify areas of paved track where silt collects and instigate an improved inspection and cleaning regime where such silt may affect the safe operation of the tramway system (paragraph 70b).</p>	<p>ORR has reported that London Tramlink 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>3            17/02/2012    04/2013</p> <p>Derailment of a tram at East Croydon</p> <p>Status: Implemented</p>	<p>The intention of this recommendation is to establish boundary values for tram wheel tyre to wheel tyre resistances and introduce requirements to take appropriate measurements during planned maintenance.</p> <p>London Tramlink should conduct a fundamental review of track circuit settings and wheel tyre to wheel tyre resistances and then put in place a system of maintenance that ensures the signalling equipment and trams are maintained to mutually compatible standards, which include due allowance for reasonably foreseeable levels of contamination at the wheel/rail interface (paragraphs 70c and 72).</p>	<p>London Tramlink 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>