

## Recommendation(s) Status: Derailment engineering train between Gloucester Rd & Earls Court London Underground

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            12/05/2010    05/2011</p> <p>Derailment engineering train between Gloucester Rd &amp; Earls Ct LU</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is for data from any equipment used to assess the track asset to show clearly what safety faults have been identified and where they are located. This will help to promote a situation where those track faults that are more reliably detected by asset inspection equipment are acted upon.</p> <p>London Underground, in consultation with Tube Lines, should arrange for all data on track faults identified by asset inspection equipment, such as the asset inspection train, to be presented clearly. The procedures for managing the data should indicate how required remedial actions are planned, prioritised and executed by those in receipt of the data (paragraph 148b).</p>	<p>London Underground, in consultation with Tube Lines have reported that they have 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            12/05/2010    05/2011</p> <p>Derailment engineering train between Gloucester Rd &amp; Earls Ct LU</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is for London Underground to make improvements to the way in which track faults are identified and classified during track inspections, thus reducing the risk that faults will be overlooked.</p> <p>London Underground, in consultation with Tube Lines, should review standard 1-159 'Track- dimension and tolerances' with a view to making changes to the standard or take other appropriate steps to make it easier for patrollers and inspectors to identify and record issues of concern (paragraph 151a).</p>	<p>London Underground, in consultation with Tube Lines have reported that they have 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            12/05/2010    05/2011</p> <p>Derailment engineering train between Gloucester Rd &amp; Earls Ct LU</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is to allow sufficient time for track patrols and inspections. This will enable staff to meet the requirements of the relevant standards for these activities, so that track faults are not missed.</p> <p>Tube Lines should review and revise its patrol route risk assessments, and inspection routes, taking account of human factors issues, to ensure there is sufficient time available to complete thorough and detailed patrolling and inspection activities in accordance with relevant standards (paragraph 149a).</p>	<p>Tube Lines 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            12/05/2010    05/2011</p> <p>Derailment engineering train between Gloucester Rd &amp; Earls Ct LU</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is for patrollers and inspectors to be adequately trained and undertake regular assessments to ensure their ongoing competence.</p> <p>Tube Lines should review its training and competence management processes for patrollers and inspectors. The review should aim to establish a comprehensive training programme for each grade of staff and a regular cycle of rigorous competence assessments (paragraphs 148a and 149b).</p>	<p>Tube Lines 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>

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<p>5            12/05/2010    05/2011</p> <p>Derailment engineering train between Gloucester Rd &amp; Earls Ct LU</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is for Tube Lines to modify its processes to make sure it assesses the effect of vacancies in safety-critical positions within Tube Lines asset maintenance organisation immediately. This should enable appropriate steps to be taken so that there is no detrimental effect on safety-critical activity.</p> <p>Tube Lines should modify its processes to include the requirement to actively monitor and assess safety critical vacancies within its asset maintenance organisation. Where key vacancies are identified the reasons for not filling the post should be explored and assessments undertaken to understand and control the risk arising. The review of key vacancies should not be limited to management grades but should include key personnel, such as those involved in asset inspections and asset condition recording (paragraph 151d).</p>	<p>Tube Lines 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>6            12/05/2010    05/2011</p> <p>Derailment engineering train between Gloucester Rd &amp; Earls Ct LU</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is for Tube Lines to ensure that systematic and regular reviews are undertaken of the quality of track patrols and inspections, including the recording of faults found and their rectification. This should achieve a more rapid identification of lapses in the quality of track patrols and inspections which could result in safety-critical faults not being identified and rectified.</p> <p>Tube Lines should improve its assurance processes to ensure a robust system of assurance activities is undertaken, with particular emphasis on practical activities. The activities should target the quality of track patrols and inspections, and the identification and prioritisation of faults. The improvements should include a process for following-up and rectifying issues identified (paragraphs 150a, and 151d).</p>	<p>Tube Lines 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>7            12/05/2010    05/2011</p> <p>Derailment engineering train between Gloucester Rd &amp; Earls Ct LU</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is for London Underground to make improvements to its processes for following-up issues found during its audit and surveillance of Tube Lines track maintenance activities.</p> <p>London Underground should improve its assurance processes to ensure that issues identified during audit and surveillance of Tube Lines track maintenance activities are actively monitored and addressed by Tube Lines in a timely manner (paragraph 150a).</p>	<p>London Underground 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>

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<p>8            12/05/2010    05/2011</p> <p>Derailment engineering train between Gloucester Rd &amp; Earls Ct LU</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is for London Underground to consider how the level of risk from ML faults should be evaluated after patrols and inspections have taken place in order to clarify the action required where there are multiple faults.</p> <p>London Underground, in partnership with its track maintainers, should review standard 1-159 'Track- dimension and tolerances' with the aim of providing guidance on the assessment of risk from ML faults. The guidance should address how the effect of other ML or SS faults in the same location or immediate vicinity should be evaluated so that impending problems at particular locations can be identified (paragraph 151b).</p>	<p>London Underground 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>9            12/05/2010    05/2011</p> <p>Derailment engineering train between Gloucester Rd &amp; Earls Ct LU</p> <p>Status: Implemented</p>	<p>The purpose of this recommendation is for Tube Lines to consider the use of technology to assist patrollers and inspectors in recording and classifying track faults, thereby reducing the risk that faults will be overlooked.</p> <p>Tube Lines should review current technologies and, following production of an action plan, implement any that can assist patrollers and inspectors. This should include the consideration of the use of hand-held computer devices to record and classify faults and geometry recording equipment that can be moved along the track to record parameters such as track gauge and twist (paragraph 148a).</p>	<p>Tube Lines 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>