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3 April 2014

Ms Carolyn Griffiths Chief Inspector of Rail Accidents Cullen House Berkshire Copse Rd Aldershot Hampshire GU11 2HP

Dear Carolyn,

RAIB Report: Collapse of the Overhead Line near to Jewellery Quarter Tram Stop, Midland Metro, 20 April 2011

I write to provide an update¹ on the consideration given and action taken in respect of recommendations 2, 3, 6 and 7 which were addressed to the ORR in the above report, published on 27 September 2012.

The annex to this letter provides details of the action taken in respect of each recommendation. The status of these recommendations is now 'Implemented'

We will publish this response on the ORR website on 25 April 2014.

Yours Sincerely

Chris O'Doherty

In accordance with Regulation 12(2)(b) of the Railways (Accident Investigation and Reporting) Regulations 2005

Recommendation 2

The purpose of this recommendation is to ensure that persons holding responsibility for directing work on the OLE on the Midland Metro and/or for passing it as being fit for service have access to up-to-date and relevant information regarding its correct installation and configuration.

National Express Midland Metro should ensure that staff within its organisation that hold responsibility for supervising work on the OLE and/or for passing it as being fit for service have, access to the information needed for them to confirm its correct installation and configuration.

This information should be up-to-date and accurate and would typically include items such as manuals, drawings or other supporting documents. This information should be made available to any third-parties undertaking similar duties.

Brief Summary on what was previously reported to RAIB on 2 August 2013

1. Discussions between National Express Midland Metro and the in system manufacturer led to the supply of further Overhead Line Equipment (OLE) maintenance documentation.

2. Supplementary work to photograph every assembly on the system and incorporate general arrangement drawings, parts lists and height and stagger measurements were being carried out to provide a manual for re-build in the event of further dewirements and to provide a reference document for maintenance and renewals activities. This work was partially completed.

Update

3. On 28 March 2014 National Express Midland Metro stated that:

National Express Midland Metro has received further maintenance documentation from the OEM and has carried out a review of its existing maintenance instruction. It has established that the latest version of its maintenance documentation, based partly on the additional material supplied and partly on the existing, now accurately reflects the installed system. This manual has been supplied to our principle contractors and the OEM, Brecknell Willis.

The work to draft a manual recording each assembly, with photographs, heights and staggers etc. is supplementary to the RAIB recommendation and is currently ongoing.

ORR Decision

4. After reviewing all the information received from ORR concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, National Express Midland Metro has taken the recommendation into consideration and has taken action to implement it.

5. ORR will write to RAIB again if it becomes aware that the information above is inaccurate.

Status: Implemented

Recommendation 3

The purpose of this recommendation is to ensure that the mechanism(s) by which operating loads are able to deform the twin track bracket arm assembly at 18512 pole are identified and addressed.

National Express Midland Metro should determine how the operating loads within the OLE are able to cause the type of deformation observed in the twin track bracket arm assembly at 18512 pole in July 2011.

It should identify and implement appropriate measures to remove the causes of this deformation.

Brief Summary on what was previously reported to RAIB on 2 August 2013

6. National Express Midland Metro had initially commissioned Brecknell Willis to carry out an assessment of loadings of the arrangement. However, a more fundamental approach was adopted to redesign the tension lengths and to replace the overlap at pole 18512 with a mid-point anchor to remove the high radial loading incurred as a result of the alignment of the 'run-in' and 'run-out' cables. This modification would serve to minimise deformation of cantilever arms.

7. The redesign and rebuild was due for completion during a partial closure of the tramway during the latter part of 2013.

Update

8. On 4 February 2014, National Express Midland Metro confirmed that the tension lengths at the overlap at pole 18512 had been redesigned and the overlap has been replaced with a mid-point anchor.

ORR Decision

9. After reviewing all the information received ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, National Express Midland Metro has taken the recommendation into consideration and has taken action to implement it.

10. ORR will write to RAIB again if it becomes aware that the information above is inaccurate.

Status: Implemented by alternative means

Recommendation 6

The purpose of this recommendation is to ensure that any risks created by a driver becoming incapacitated during an incident are assessed and that appropriate mitigation measures are adopted by National Express Midland Metro.

National Express Midland Metro should assess what, if any, risks would be created by a driver becoming incapacitated during an incident. It should identify and implement appropriate measures to manage any identified risks, such as additional training for CSRs [Customer Service Representatives].

Brief Summary on what was previously reported to RAIB on 2 August 2013

11. National Express Midland Metro carried out a risk assessment on 30 November 2012. Actions arising from the risk assessment had been implemented within the business and training was on-going within the periodic operational training arrangements. The company's operational procedure for managing incidents had been reviewed to reflect the changes to staff roles.

12. Medical periodicities were reviewed and no changes were identified as being necessary.

13. CSRs were to be PriMOSS (Primary member of staff at the scene), Emergency Evacuation of Trams and Radio Communications trained with instruction to be issued for CSR's to carry cab keys, radio and 'T' key at all times (to mitigate the on-going risk until the CSR training programme was completed (Timescale 30 November 2013).

Update

14. National Express Midland Metro has:

- Introduced training and management for the 'Primary member of staff at the scene';
- Revised the procedure for dealing with incidents, OPS 013, to include the role of PriMOSS; and
- Issued instructions regarding the carrying of necessary equipment at all times whilst on board a tram.

ORR Decision

15. After reviewing all the information ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, National Express Midland Metro has taken the recommendation into consideration and has taken action to implement it.

16. ORR will write to RAIB again if it becomes aware that the information above is inaccurate.

Status: Implemented

Recommendation 7

The purpose of this recommendation is to ensure that the mandatory competencies of drivers and CSRs are assessed and that those found critical to the safe operation of the Midland Metro are subject to a competence management system that ensures they are achieved and maintained.

National Express Midland Metro should review the current mandatory competences held by drivers and CSRs in order to identify those which are essential to the safe operation of the Midland Metro. It should identify and implement appropriate measures to ensure that all such competences are maintained.

Brief Summary on what was previously reported to RAIB on 2 August 2013

17. National Express Midland Metro had reviewed the mandatory competencies held by drivers and CSRs; revised The operational staff competencies and defined PriMOSS, Radio Communications and Emergency Evacuation of as a Safety Critical competency for CSR and Driver staff.

18. CSR and Driver grade staff were still to be trained in 'PriMOSS, Radio Communications and Emergency Evacuation of Trams' on rostered training days in 2013 and thereafter be refreshed every three years. (Initial training was to be carried out by 30 November 2013).

Update

19. On 4 February 2014, National Express Midland Metro provided ORR with a *'Competency Chart'* showing that CSR and Driver grade staff had received initial training in in 'PriMOSS, Radio Communications and Emergency Evacuation of Trams'.

ORR Decision

20. After reviewing all the information received ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, National Express Midland Metro has taken the recommendation into consideration and has taken action to implement it.

21. ORR will write to RAIB again if it becomes aware that the information above is inaccurate.

Status: Implemented