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9 June 2014

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

Dear Carolyn,

RAIB Report: Train fire at South Gosforth, 8 January 2013

I write to report¹ on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 25 September 2013.

The annex to this letter provides details of the consideration given and action being taken in respect of each recommendation where the status of recommendations 1 and 2 are 'implementation on-going' and recommendation 3 is 'in progress'².

We do not propose to take any further action in respect of recommendations 1 and 2 unless we become aware that any of the information provided becomes inaccurate, in which case I will write to you again³. We expect to update you on progress with recommendation 3 by 19 December 2014.

We will publish this response on the ORR website on 27 June 2014.

Yours Sincerely,

Chris O'Doherty

¹ In accordance with Regulation 12(2)(b) of the Railways (Accident Investigation and Reporting) Regulations 2005

² In accordance with Regulation 12(2)(b)(i)

³ In accordance with Regulation 12(2)(c)

Initial Consideration by ORR

1. All 3 recommendations contained in the report were addressed to ORR when RAIB published its report on 25 September 2013.
2. After considering the report / recommendations, on 11 October 2013, ORR passed all 3 Recommendations to Nexus and DBTW asking them to consider and where appropriate act upon them.
3. Details of consideration given and any action taken, in respect of these recommendations are provided below.

Recommendation 1

The objective of this recommendation is that Nexus, with support from DBTW, should identify and mitigate the risk associated with electrical breakdown in the train line breaker assemblies.

Nexus, supported by DBTW, should carry out a detailed assessment of the risk associated with faults in the line breaker unit, which should include:

- identification of actual and potential failure mechanisms and an estimate of their likely frequency;
- consideration of the possible effects of line breaker faults, taking account of the configuration and reliability of the electrical protection systems currently provided on the Metro system; and
- consideration of possible consequences, taking account of the potential for fire in high risk environments, such as tunnels. Appropriate actions to reduce the risk and potential consequences of failures should be defined and implemented following the review.

Details of steps taken or being taken to implement the recommendation

1. Nexus and DBTW in their joint initial response on 25 November 2013 advised that:

A joint action plan has been produced to reduce the risks associated with line circuit breaker fires and enhance D.C. protection systems. This contains the timescales for implementation of the additional control measures identified.

A joint assessment of risks has taken place. [ORR was provided with this document].

The timescales for implementing any additional control measures arising from this assessment, which aren't already contained in the action plan, will be defined by the end of March 2014.

Timescale: end of March 2014.

On 1 April 2014 Nexus and DBTW provided an updated joint action plan with details of the additional control measures they identified. (Refer to table below).

ORR Decision

2. After reviewing information received ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Nexus and DBTW have:

- taken the recommendation into consideration and:
- are taking action to implement it.

Status: *Implementation On-going*; completion date 31 December 2014. ORR will continue to engage with Nexus and DBTW to assure all actions are completed.

Recommendation 2

The objective of this recommendation is to facilitate passenger evacuation from trains using the emergency handles to release doors by identifying a maximum level of force required to operate them and then periodically checking that handles comply with the identified maximum.

DBTW, supported by Nexus, should establish the maximum level of force required to enable a diverse range (such as 5th percentile female to 95th percentile male) of passengers to easily operate the emergency door release handles on the Metro car fleet, and implement the necessary inspection and maintenance processes to achieve it in practice, taking account of the need to balance the ease of operation in emergency with the risk of undesired door releases.

Details of steps taken or being taken to implement the recommendation

3. Nexus and DBTW in their joint initial response on 25 November 2013 advised that:

An initial investigation has taken place which has established the forces required to operate the levers, and forces which might be realistically applied by 5th percentile females: [ORR was provided with this document]. The report outlines the further work necessary to scope the problem and make reasonable adjustments. It is planned to conclude the investigation by the end of March 2014 and make reasonable adjustments to reduce the forces required to operate the levers by September 2014.

Timescale: September 2014.

ORR Decision

4. After reviewing information received ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Nexus and DBTW have:

- taken the recommendation into consideration and
- are taking action to implement it.

Status: *Implementation On-going*; completion date 31 December 2014. ORR will continue to engage with Nexus and DBTW to assure all actions are completed.

Recommendation 3

The objective of this recommendation is to improve the reliability of the radio communication system used on the Metro network.

Nexus should review the communication systems used on the Metro network, establish an appropriate level of reliability/availability for them, and implement, in a defined timescale, the introduction of suitable improvements.

Details of steps taken or being taken to implement the recommendation

5. Nexus and DBTW in their joint initial response on 25 November 2013 advised that:

At the time of the incident, Nexus was already in the process of procuring a new radio system which is scheduled for introduction in mid-2015. In the interim, work is on-going to ensure that the current radio system continues to operate within acceptable parameters. Interim measures include a survey of radio black spots and an additional radio mast at Tyne Dock.

DBTW has been involved in development of the specification for the new system which contains an option for portable radio handsets.

Timescale: Mid-2015.

ORR Decision

After reviewing information received ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Nexus and DBTW have:

- taken the recommendation into consideration and
- are taking action to implement it.

Status: *In-progress.* ORR is monitoring interim arrangement to assure that they are adequate and will provide RAIB with an update on progress by 19 December 2014.