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Recommendation Handling

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15 April 2020



Mr Andrew Hall
Deputy Chief Inspector of Rail Accidents
Cullen House
Berkshire Copse Rd
Aldershot
Hampshire GU11 2HP

Dear Andrew,

RAIB Report: Partial collapse of a bridge onto open railway lines at Barrow upon Soar, Leicestershire on 1 August 2016

I write to provide an update¹ on the action taken in respect of recommendations 1 & 2 addressed to ORR in the above report, published on 6 June 2017.

The annex to this letter provides details of the action taken regarding the recommendations. The status of recommendations 1 & 2 is '**Progressing**'.

ORR will advise RAIB when further information is available regarding actions being taken to address these recommendations.

We will publish this response on the ORR website on 16 April 2020.

Yours sincerely,

Oliver Stewart

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

Recommendation 1

The intent of this recommendation is that Network Rail's asset management teams have sufficient competence and information to manage the potential risk to its structures from breaches of water and other relevant utilities (eg gas).

Network Rail should:

- a. identify in its structures database those structures that carry water (and other) utilities so that this information is readily available to its asset engineers, structures examination contractors, and minor works contractors (paragraphs 124c 124d and 125);
- b. provide training and guidance to its asset engineers and structures examination contractors so that they are able to identify the presence of water (and other) utilities in structures, recognise defects caused by leaks, are aware of the consequences of a major utility failure, and decide on appropriate actions to be taken (paragraphs 124c and 125);
- c. introduce a requirement in its procedures to notify the relevant utility company about any emerging problems which might affect the integrity of a structure, to enable early remedial action and prevention of further deterioration (paragraphs 124c); and
- d. rebrief its asset engineers and structures examination contractors on the importance of recording evidence of underground utilities and any changes since the previous examination, as required by current Network Rail company standards

ORR decision

1. Network Rail have taken the risk associated with the recommendation into consideration, but are not implementing the measures prescribed in the recommendation. Instead they are planning to produce guidance for their asset engineers on how to identify structures that carry utilities, as they consider the information provided by the utility companies to not be suitably reliable.
2. We have asked Network Rail to justify this assertion and how the proposed alternative approach can achieve the required outcome. We have also suggested they consider the merits of combining both approaches. We have asked Network Rail to provide us with a copy of the guidance note when available and evidence it has been briefed out.
3. For part C of the recommendation, we will ask Network Rail for evidence they have a procedure for notifying utility companies about emerging problems with a particular asset and which standards are going to be updated. For part D, we will ask Network Rail for a copy of the rebriefing material and evidence it has been briefed out.

4. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:

- taken the recommendation into consideration; and
- are taking actions to address the risks associated with the recommendation, but potentially without meeting the explicit requirements of it.

Status: Progressing. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Previously reported to RAIB

5. On 5 June 2018, ORR reported that Network Rail provided an initial response on 1 June 2018, but this did not give ORR time to carry out our usual governance procedures before the 12-month deadline for responding to RAIB by 5 June 2018.

Update

6. On 19 June 2018 Network Rail provided the following initial response:

The intent of the recommendation to ensure Network Rail's asset management teams have sufficient competence and information to manage the potential risk to its structures from breaches of water and other relevant utilities will be achieved by alternative means.

Identifying in the structures database those structures that carry utilities so that this information is readily available would lead to an incomplete and inaccurate data set despite Network Rail's best efforts due to lack of provision of data or incoming data quality from utility companies. This could lead to incorrect assumptions about the presence, or lack of, statutory undertaker's plant over assets. Network Rail therefore intends to specify that asset engineers should undertake searches for utilities when evaluating an asset with a defect that could have manifested, or accelerate in rate of degradation, due to water. A similar requirement is already in place for the planning of minor works; however this will be made more explicit.

A guidance note will be produced to assist in asset evaluation so that asset engineers and structures examination contractors are able to identify the presence of water and other utilities in structures, recognise defects caused by leaks, are aware of the consequences of a major utility failure, and decide on appropriate actions to be taken.

Network Rail routinely notify emerging issues which might affect the integrity of a structure to the relevant utility, however this requirement will be made more explicit in the standards update described above.

Network Rail will re-brief our asset engineers and structures examination contractors on the importance of recording evidence of underground utilities and any changes

since the previous examination, as part of the guidance note and briefing identified above.

7. Network Rail wrote to us on 9 January 2020 to confirm that the actions as set out had been completed.

Recommendation 2

The intent of this recommendation is that future intrusive investigations and repairs of bridge structures take into account the potential risks of significant structural damage or collapse arising from a breach of a buried utility.

Network Rail should:

a. review how it procures intrusive works to its structures carrying water (and other) utilities, and verify that the process provides for sufficient input by suitably qualified engineers to assess the risk to the structure from the proposed works;

b. review its process for determining the appropriate level of competence for site supervision of the works;

and c. address any deficiencies found.

ORR decision

8. Network Rail is carrying out a review of how it procures intrusive works to structures carrying utilities.

9. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:

- taken the recommendation into consideration; and
- is taking action to implement it, but ORR has yet to be provided with a timebound plan.

Status: Progressing. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Previously reported to RAIB

10. On 5 June 2018, ORR reported that Network Rail provided an initial response on 1 June 2018, but this did not give ORR time to carry out our usual governance procedures before the 12-month deadline for responding to RAIB by 5 June 2018.

Update

11. On 15 October 2019, Network Rail notified ORR that the timescale for completing the work was 31 December 2021:

Network Rail is undertaking a review of how it procures intrusive works to its structures carrying water (and other) utilities, and will verify that the process provides for sufficient input by suitably qualified engineers to assess the risk to the structure from the proposed works. The relevant standards and assurance processes will be reviewed and if necessary updated.

Network Rail has a competency review in progress and as part of this will review the process for determining the appropriate level of competence for site supervision of works.

Depending on the outcome of the review of the relevant standards and assurance processes any required training address any deficiencies found will be completed by Dec 2021.

Previously reported to RAIB

Recommendation 1

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- c. introduce a requirement in its procedures to notify the relevant utility company about any emerging problems which might affect the integrity of a structure, to enable early remedial action and prevention of further deterioration (paragraphs 124c); and
- d. rebrief its asset engineers and structures examination contractors on the importance of recording evidence of underground utilities and any changes since the previous examination, as required by current Network Rail company standards

ORR decision

1. ORR has not had time to review the Network Rail response before the 12 month deadline for responding to RAIB on the status of this recommendation. We will provide RAIB with an update, once we have had a chance to formally review the Network Rail response.
2. ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:
 - taken the recommendation into consideration; and
 - has provided a response setting out how the recommendation will be addressed, but not within the timescale for ORR to respond to RAIB

Status: *Insufficient response*. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Information in support of ORR decision

3. Network Rail provided an initial response on 1 June 2018, but this did not give ORR time to carry out our usual governance procedures before the 12-month deadline for responding to RAIB by 5 June 2018.

Recommendation 2

The intent of this recommendation is that future intrusive investigations and repairs of bridge structures take into account the potential risks of significant structural damage or collapse arising from a breach of a buried utility.

Network Rail should:

a. review how it procures intrusive works to its structures carrying water (and other) utilities, and verify that the process provides for sufficient input by suitably qualified engineers to assess the risk to the structure from the proposed works;

b. review its process for determining the appropriate level of competence for site supervision of the works;

and c. address any deficiencies found.

ORR decision

4. ORR has not had time to review the Network Rail response before the 12 month deadline for responding to RAIB on the status of this recommendation. We will provide RAIB with an update, once we have had a chance to formally review the Network Rail response.

5. ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:

- taken the recommendation into consideration; and
- has provided a response setting out how the recommendation will be addressed, but not within the timescale for ORR to respond to RAIB

Status: *Insufficient response*. ORR will advise RAIB when further information is available regarding actions being taken to address this recommendation.

Information in support of ORR decision

6. Network Rail provided an initial response on 1 June 2018, but this did not give ORR time to carry out our usual governance procedures before the 12-month deadline for responding to RAIB by 5 June 2018.