# Oliver Stewart RAIB Recommendation Handling Manager



3 February 2023

Mr Andy Lewis Deputy Chief Inspector of Rail Accidents

Dear Andy,

## RAIB Report: Collision between a train and a collapsed signal post at Newbury on 17 November 2014

I write to provide an update<sup>1</sup> on the action taken in respect of recommendation 2 addressed to ORR in the above report, published on 23 September 2015.

The annex to this letter provides details of actions taken in response to the recommendation and the status decided by ORR. The status of recommendation 2 is 'Closed'.

We do not propose to take any further action in respect of the recommendation, unless we become aware that any of the information provided has become inaccurate, in which case I will write to you again.

We will publish this response on the ORR website on 6 February 2023

Yours sincerely,

Oliver Stewart

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

#### Recommendation 2

The intent of this recommendation is to reduce the risk of corrosion at the base of ancillary structures and to allow examination of baseplates fixed to foundations.

Network Rail should develop and implement a risk assessment process to determine when it is necessary for the critical elements of ancillary structures to be exposed for the purposes of examination and/or to mitigate the risk of corrosion. The process should take into account the specific risk of corrosion of buried metalwork on hollow section ancillary structures that are fixed to foundations.

#### **ORR** decision

- 1. Network Rail has developed and embedded a risk assessment process in the structures examination system and incorporated it in the standard NR/L3/CIV/006/2D. The risk assessment takes account of the age of a structure, structural form, location and condition.
- 2. Network Rail initially planned to address the recommendation by the introduction of the Civils Structures Asset Management System (CSAMS). The roll out of CSAMS was repeatedly delayed and it was eventually abandoned, therefore Network Rail introduced a replacement database to facilitate examinations the Ancillary Examination solution (AES; based around Polestar). So the delay between our initial response to this recommendation in 2016 and the closure statement in 2022 was due to waiting for CSAMS and then developing the AES once it was clear that CSAMS was not going to be delivered.
- 3. 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
  - has taken action to implement it

Status: Closed.

#### Previously reported to RAIB

4. On 21 September 2016 ORR reported the following:

ORR is content with Network Rail's response to the recommendation but has asked for confirmation that the planned HCE examinations will include the elements of structures that are buried beneath ballast.

## **Update**

5. On 7 January 2022 Network Rail provided the following closure statement:



### Previously reported to RAIB

#### **Recommendation 2**

The intent of this recommendation is to reduce the risk of corrosion at the base of ancillary structures and to allow examination of baseplates fixed to foundations.

Network Rail should develop and implement a risk assessment process to determine when it is necessary for the critical elements of ancillary structures to be exposed for the purposes of examination and/or to mitigate the risk of corrosion. The process should take into account the specific risk of corrosion of buried metalwork on hollow section ancillary structures that are fixed to foundations.

#### **ORR** decision

- 1. ORR is content with Network Rail's response to the recommendation but has asked for confirmation that the planned HCE examinations will include the elements of structures that are buried beneath ballast.
- 2. 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.

### Information in support of ORR decision

3. On 16 December 2015 Network Rail provided the following initial response:

Network Rail has developed an enhanced visual examination regime in response to the Newbury incident (see NR action plan to address Rec 1).

Following successful implementation of this enhanced regime, in conjunction with the actions to address recommendation No1, the proposal to develop a programme of Hidden Critical Elements (HCE) examinations for ancillary assets will be developed.

The HCE programme will determine the required extent of any intrusive exam, the frequency and applicability of asset type to facilitate the examination of buried, obscured components such as baseplates buried in ballast or clad or obscured superstructure.

#### Timescale:

Implement programme of HCE ancillary asset examinations in conjunction with publication of integrated policy by 2nd December 2016.

- 4. On 1 February 2016 ORR requested that Network Rail clarify whether the new enhanced visual examination regime or Hidden Critical Elements examinations will deliver the recommendation requirement to develop and implement a risk assessment process.
- 5. On 10 March 2016 Network Rail provided the following further update:

Network Rail's response to this recommendation states that a programme of Hidden Critical Elements (HCE) examinations will be developed for ancillary assets. This will be an extension of the current HCE programme which at the moment applies to Bridges, Culverts and 'bridge like' structures that span or cantilever the operational railway.

The HCE programme will require the: -

- Identification of applicable HCE details (risk factors)
- Determination of asset types with such details and their registration
- Implementation of a risk prioritised programme of examinations (considering age, asset type/construction, consequence of failure, adequacy of current condition, the amount of contemporary conditional data, effectiveness of other examinations within the overall regime, known/ forecast deterioration/corrosion rates, condition of protective coatings, expected serviceable life, type and number of HCE details present)
- Following implementation, the business as usual HCE process with entail periodic examination with risk based frequencies, review of onsite findings from initial examinations, defined follow on actions and interventions/ renewals in line with an integrated asset policy
- Maintain records, revise and review accordingly.

The HCE programme will in effect be a process which identifies risk factors and enables a process of controls to be implemented, i.e. a risk assessment process which determines when it is necessary for the critical elements of ancillary assets to be exposed for the purposes of examination and /or to mitigate the risk of corrosion.

6. ORR wrote to Network Rail on 27 May asking for confirmation that the proposed programme of HCE examinations will include the elements of structures that are buried beneath ballast (as indicated in its 16 December response) and to provide timescales for each of the individual HCE programme milestones set out in its latest response. No response has been received to date.