

Oliver Stewart
RAIB Recommendation Handling Manager



1 August 2024

Mr Andy Lewis
Deputy Chief Inspector of Rail Accidents

Dear Andy,

RAIB Report: Collision between a train and a piece of equipment at Barrow-on-Soar, Leicestershire on 14 February 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 27 October 2016.

The annex to this letter provides details of actions taken in response to the recommendations 1 & 2 and the status decided by ORR. The status of recommendations 1 & 2 is **'Closed'**.

We do not propose to take any further action in respect of the recommendations, 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.

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 Tarmac and Wabtec take steps to address the risk that the use and maintenance of rail vehicles poses to passing trains, not just directly to staff.

Tarmac and Wabtec should review and improve their processes for hazard identification and risk assessment to ensure that they encompass consideration of the risk that their rail operations, including maintenance activities, might pose to other railway operations

ORR decision

1. In response to the recommendation Wabtec carried out a review of hazard identification and risk management processes. As a result of the review, Wabtec introduced a revised risk assessment process which includes a consideration of work that may impact railway operations, including nearby running lines.

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

- taken the recommendation into consideration; and
- have taken action to close it

Status: Closed.

Previously reported to RAIB

3. On 26 October 2017 ORR reported the following:

We have asked Wabtec to confirm the outcome of their review into their processes for hazard identification and risk assessment and to qualify what they consider constitutes a mature SMS. The outcome of the review and how it is implemented will also be considered through usual supervision of the duty holder.

Update

4. On 31 January 2021 Wabtec provided the following update:

New Point of Work Risk Assessment (PoW RA) introduced which specifically asks about work affecting nearby running lines, also movement on lines etc. This is completed by the operative prior to work taking place and if there are any concerns the job is stopped and escalated to Senior Management. All off-site employees have been trained in PoW RA completion.

Our risk assessment pack HSF-069 has been revised and now includes a specific section within hazard identification on rail operations e.g. can our work impact running/ adjacent lines. We now carry out RAs as team events, attached procedure HSP-05 applies. The team includes at least one operative who carries out the task

as part of their day to day duties and when the RA is complete the employee(s) involved signs off the front sheet. Risk assessments are then audited against using our Safety Behavioural Observation programme.

We consider the status of this recommendation as “implemented”.



HSF-050a - Point of
Work RA siding dep



HSF-069 - Blank



HSP-05 Hazard
Risk Assessment Ma
Identification and A

Recommendation 2

The intent of this recommendation is to ensure that Wabtec’s management of maintenance and inspection is effective.

Wabtec should review its management arrangements at Barrow Railhead to ensure that the maintenance and inspection procedures are clearly defined, understood and correctly executed. This should include definition of the areas of the site where the type of work is prohibited or permitted.

This may also apply to other Wabtec maintenance sites.

ORR decision

5. Each site where Wabtec operates has a written suite of documents setting out the type and location of work permitted. Essential site safety rules (ESSR), covers site-specific matters and a risk assessment method statement (RAMS), sets out what type of work is allowed on each area of the site.

6. The ESSR does include areas of the site where work is permitted, meaning effectively in other areas, the work is prohibited, which address the other part of the recommendation. Wabtec have provided copies of ESSRs for both freight and passenger activities, which demonstrates the process being applied at other maintenance sites.

7. An ORR supervision inspection of VTG at Barrow Railhead observed the Wabtec (as a contractor to VTG) ESSR in use and it was considered to function appropriately.

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

- taken the recommendation into consideration; and
- have taken action to close it

Status: Closed.

Previously reported to RAIB

9. On 26 October 2017 ORR reported the following:

ORR is content with the review of the management arrangements Wabtec have carried out at the incident location and support the revised arrangements they plan to have in place by the end of 2017.

Update

10. On 31 January 2021 Wabtec provided the following update:

Our Essential Site Safety Rules (ESSR Document) clearly defines for each site visited by the Wabtec Rail Freight Offsite team, which areas of site that are permitted for work being undertaken and the scope of work that can be undertaken in that area of site. Each mobile fitter is issued with a personal iPad which is used to disseminate the issue, acknowledgement and status of documentation used on a day to day basis. In addition to the ESSR regarding “what can be done where”, the iPad system is also used to control the technical instructions for the work being undertaken as well as to record work done in near real time which is sent back to office automatically.

For newer sites, until an ESSR is completed and issued, hazards are controlled through the undertaking of a PoW RA as detailed in my earlier response to Recommendation 1.

As a result, we consider the status of this recommendation as “implemented”.

11. On 5 February 2021 we responded to Wabtec as follows:

For recommendation 2, the information provided does not specifically refer to Barrow rail head. Can you confirm if Wabtec has responsibility to undertake work at Barrow rail head and provide documentation for that location, including areas of the site where certain work is prohibited or permitted.

If Wabtec no longer carry out work at Barrow rail head, can you confirm how the documentation provided addresses the point in the RAIB recommendation about areas and types of work permitted at other locations.

12. On 9 February 2021 Wabtec responded as follows:

You are correct in that Wabtec no longer undertake maintenance at Barrow Rail Head. However, the principles of ESSR are well established and I attach a representative copy for one of Wabtec’s sites. These ESSR documents are periodically reviewed and updated and re-issued as required.



ESSR Rober Road
Issue 4.pdf

These are our standard control documents for all off-site working locations. Section 2 details what work can be done where on-site. I would kindly request that you consider this alongside my earlier mail in the trail below.

11. On 18 June 2024 Wabtec sent the following typical examples of ESSR covering both the Freight & Passenger offsite Operations:



iAM-ESSR-005_Newt
on Heath - Issue 6.pdf



FR-ESSR-017
Peterborough Issue 6.

Previously reported to RAIB

Recommendation 1

The intent of this recommendation is that Tarmac and Wabtec take steps to address the risk that the use and maintenance of rail vehicles poses to passing trains, not just directly to staff.

Tarmac and Wabtec should review and improve their processes for hazard identification and risk assessment to ensure that they encompass consideration of the risk that their rail operations, including maintenance activities, might pose to other railway operations

ORR decision

Wabtec

1. We have asked Wabtec to confirm the outcome of their review into their processes for hazard identification and risk assessment and to qualify what they consider constitutes a mature SMS. The outcome of the review and how it is implemented will also be considered through usual supervision of the duty holder.
2. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Wabtec has:
 - taken the recommendation into consideration; and
 - is taking action to implement it, but ORR has yet to be provided with the outcome of their review and a time-bound plan for any resulting actions.

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 17 February 2017 Wabtec provided the following initial response:
 - 1.1 *Wabtec has considered and reviewed its process for hazard identification and risk assessment and made some enhancements to ensure that, where necessary, there is consideration of what potential risks arise from its maintenance activities to other railway third party operations.*
 - 1.2 *As part of Wabtec's continuous and pre-existing effort to ensure high standards in relation to safety, an approach internally known as "Deepwater Horizon" ("DWH") has been introduced. This includes a Failure Mode Effects Analysis ("FMEA") process to consider and assess the severity, likelihood and ease of detection of risk and generate a risk priority number ("RPN"). These ratings score from a reliability, safety and quality perspective.*
 - 1.3 *FMEA also involves consideration of potentially the worst case scenarios. In regard to off-site freight facilities, FMEA considers the vehicles being*

maintained and the tasks undertaken, breaks the train structure down into different component parts and elements, and considers any potential risks arising from them that could affect other railway operations.

1.4 By focusing on the highest RPNs identified, the most significant critical risks will be regularly inspected by Wabtec management on a daily, weekly and monthly basis. Furthermore, additional health and safety ("H&S") site audits are also being undertaken across all freight off-site facilities to consider current site arrangements and what hazards have been assessed. This has involved shadowing employees working on site and observing the type and frequency of tasks carried out, and assessing locations and proximity of work to other operations. If locations are near to any running lines, it will consider what alternative locations may be available, if not already considered, and what, if any, other potential risks may arise from work at that location.

1.5 The above thinking, process and approach is already well underway, but will become more mature during 2017. It will ensure management continues to focus on the most important and critical areas identified and ensure that any potential risks have been identified and adequate controls are implemented.

1.6 Wabtec already operated a suite of generic and specific risk assessments, but also intend, as belt and braces, to add a specific rail operations section to the hazard identification section of its master risk assessment by end of March 2017, to ensure that, where not otherwise assessed and considered i.e. by site rules, safe systems of work, specific risk assessments, infrastructure operations and hazards are considered.

Tarmac

4. We are content that Tarmac have reviewed their processes for hazard identification and risk assessment and identified a number of improvements.

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

- taken the recommendation into consideration; and
- has taken action to implement it.

Status: Implemented.

Information in support of ORR decision

6. On 30 March 2017 Tarmac provided a list of documents and processes they had in place at the time of the incident. The processes they had in place to assess and control the risks associated with operating a freight yard were summarised as follows:

Tarmac had a number of process/procedures in place pre incident for hazard identification and risk assessment which included: Rail Standard 41, HIRA, Joint Methods of Working and Trackside Awareness Training to set

fundamental standards in relation to the way in which the businesses rail operations were conducted.

The purpose of these processes/procedures was to educate site managers and employees about hazard identification and risk assessment, with the overall aim of reducing the risk arising from rail activities (including maintenance) to a level as low as reasonably practicable.

Irrespective, post incident Tarmac invested in detailed a health and safety review of the operations at all of its 47 sites which encompass rail activity to assess the suitability of controls in place, particularly around risk management and contractor control procedures.

All HIRA's were reviewed to ensure that they were suitable and sufficient. In addition, JMOW's were reviewed to ensure that they were sufficiently clear and concise so that roles and responsibilities were understood.

As a separate exercise, Tarmac instructed (a) RailFreight Consulting to audit all of its Train Operators; and (b) David Barney (Chairman of the Private Wagon Federation and Industry Expert), to audit the activities of Wagon Operators.

Where non-compliance has been identified, each lead contact at the relevant supplier has been asked to revert to tarmac to verify (a) the measures taken; and (b) to confirm that the non-compliance has been addressed.

All outstanding matters have now been dealt with, and so far as Tarmac are aware all suppliers are acting in accordance with all relevant rail regulations and associated health and safety legislation.

In addition, Tarmac have implemented a new Track Management Standard which sets out Tarmac's requirements in detail to ensure that all sites are correctly managed. Compliance is verified by annual audit/inspection, or sooner if circumstances arise when an earlier review is warranted.

Additional training has also been delivered to Tarmac employees who have responsibilities for rail activities at Tarmac's sites, which has included: (a) Rail Safety Workshops delivered by VictaRailFreight in Manchester, London, Edinburgh and Cambridge. The Workshops covered: health and safety responsibilities on site; management of documentation; hazard awareness; key interactions with personnel on site; and management of contractors. To date over 100 managers and supervisors have received this training; and (b) enhanced Tracksides Awareness training which is compulsory and employee understanding assessed by way of course assessment.

Recommendation 2

The intent of this recommendation is to ensure that Wabtec's management of maintenance and inspection is effective.

Wabtec should review its management arrangements at Barrow Railhead to ensure that the maintenance and inspection procedures are clearly defined, understood and correctly executed. This should include definition of the areas of the site where the type of work is prohibited or permitted.

This may also apply to other Wabtec maintenance sites.

ORR decision

7. ORR is content with the review of the management arrangements Wabtec have carried out at the incident location and support the revised arrangements they plan to have in place by the end of 2017.

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

- taken the recommendation into consideration; and
- is taking action to implement it by 31 December 2017.

Status: Implementation ongoing. ORR will advise RAIB when actions to address this recommendation have been completed.

Information in support of ORR decision

9. On 17 February 2017 Wabtec provided the following initial response:

2.1 Following the events at Mount Sorrell on 14 February 2016, Wabtec committed to reviewing its arrangements at site with input from its management, site, and health and safety team. Given that Tarmac oversee and control all of site operations, Wabtec gave consultation and sought agreement from Tarmac.

2.2 As a result of that review and specifically, in response to controlling scope of work and locations of work at Barrow Railhead, an updated Safe System of Work for WRL personnel at Barrow Railhead (Tarmac) was produced and approved in June 2016. Tarmac's Site Manager signed off on the document to agree to the revised system of work. The intention of the revised document was to provide further clarity around designated work areas, operations, and maintenance activities to be carried out, and define where work could and could not take place.

2.3 As previously mentioned already for recommendation 1, Wabtec are undertaking an audit of its remote freight off-site maintenance facilities to ensure that arrangements remain adequate. This initial process has already allowed the highest risk sites (based on proximity to main line railway operations and frequency of work) to be identified. All of the potentially highest priority risk sites have been visited by a review team, consisting of an independent health and safety expert (a former principal HSE Inspector) and a Wabtec Freight fitter, to consider hazards on those sites and methods for their control.

2.4 A new suite of documentation has also been designed to help standardise and reinforce the 'Essential Site Safety Rules' ("ESSR") at each location,

detailing in clear and concise language, with the support of pictures to illustrate acceptable practices. These documents specifically include the following sections:

2.4.1 Tasks Permitted on Site; 2.4.2 Sign-in and induction requirements 2.4.3 Lone Working Requirements; 2.4.4 Personal Protective Equipment; 2.4.5 Work Restrictions; 2.4.6 Line Protection; 2.4.7 Shunting Operations; and 2.4.8 Emergency Contact Numbers.

2.5 “Work Restrictions” will detail any specific requirements where there may be any potential proximity risk to third party railway operations and how these will be controlled. New ESSR documents are currently being rolled and trained out and will be completed by end of 2017, starting with the most regularly visited sites by Wabtec freight department and those closest to mainline operations.

2.6 Wabtec is also investing in new technology and hardware to enable documents to be more readily distributed to the off-site fitters electronically via a central server. Each off-site fitter will be issued with a personal iPad and receive all ESSR documentation via this. The application requires each user to read and acknowledge receipt and understanding of the ESSR. There is a 'Golden Rules' questions criteria that provides a booking-on procedure requiring fitters to answer ten questions prior to work. If they cannot answer in the affirmative to all questions, work will not proceed. It is anticipated that this technology will be deployed and put it into use by June 2017. This reporting process and the further regular inspections, which will take place as part of the DWH process, provide a further way of readily monitoring and checking execution of ESSR.

2.7 In light of the above, this will ensure that Wabtec will naturally consider this recommendation, if required, across its other sites. Wabtec are confident that its systems and approach would, if not already, identify hazards and necessary controls to manage and mitigate risk that may arise from its maintenance activities, including of electrical systems, where necessary. Wabtec anticipates in adopting the approach set out in regards to recommendation 1 and 2; this will continue to ensure that Wabtec's management of its maintenance activities and inspections remain effective.