Oliver Stewart
Senior Executive, RAIB Relationship and Recommendation Handling
Telephone 020 7282 3864
E-mail oliver.stewart@orr.gsi.gov.uk

OFFICE OF RAIL AND ROAD

10 January 2017

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

Dear Andrew,

RAIB Report: Derailment at Washwood Heath West Junction, Birmingham, 23 March 2015

I write to report[1] on the consideration given and action taken in respect of recommendations the three recommendations addressed to ORR in the above report, published on 11 January 2016.

The annex to this letter provides details in respect of each recommendation.

The status of recommendations 1 and 3 is **'Implementation ongoing'**. The status of recommendation 2 is '**implemented**'. 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 11 January 2017.

Yours sincerely,

Oliver Stewart

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

Initial consideration by ORR

1. All 3 recommendations were addressed to ORR when the report was published on 11 January2016.

2. After considering the recommendations ORR passed recommendations 1 and 2 to VTG UK and recommendation 3 to Network Rail, asking them to consider and where appropriate act upon them and advise ORR of their conclusions. The consideration given to each recommendation is included below.

3. ORR also brought recommendation 1 and 2 to the attention of other ECMs and owners and operators of freight wagons as it was concluded that that there are equally important lessons for them. ORR did not ask these organisations to provide a formal reply. The report and recommendations 1 and 2 were also brought to the attention of the Freight Technical Committee for discussion at that meeting.

Recommendation 1

The intent of this recommendation is to alter the maintenance instructions for former AAE Megafret wagons running in the UK to clarify when the centre pivot liners should be checked, to reduce the likelihood of these items becoming worn to the extent that the safety of the wagon is compromised.

VTG AG should update the maintenance instructions for its Megafret wagons operating in the UK to clarify the method to be used to check for wear of the centre pivot liner, and clearly specify the periodicity for these checks (paragraph 135a). In defining this periodicity VTG AG should take into account the wear characteristics of centre pivot liners that it permits to be installed and the distance travelled by the wagons.

This recommendation may also be applicable to VTG AG's Megafret wagons operating in other countries.

ORR decision

4. VTG AG have Introduced a new type of pivot liner to their Megafret fleet, which should have a longer service life. VTG have rewritten their maintenance plans and policies to reflect the wear rate of the new centre pivot liner and full implementation of the new plans will be complete by June 2017. For wagons that have not had the new pivot liners fitted, VTG have introduced on-going, in field checks to ensure they remain in a safe condition. VTG UK will manage the UK-based Megafret fleet in future under VTG AG as the ECM.

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

- taken the recommendation into consideration; and
- has taken action to implement it, by June 2017.

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

Information in support of ORR decision

6. On 11 April 2016, VTG UK provided the following initial response:

VTG AG will no longer fit the liner type detailed in the RAIB report, which proved to be a causal factor of the derailment. The Centre Pivot Liner (CPL) type which will be fitted from now on is manufactured from a different material with a significantly better life cycle and is one that VTG UK has many years of experience with. The VTG Megafrets have also had their maintenance plans and policies completely re- written and they include maintenance periodicities that coincide with the new CPL wear rates together with a factor of safety. These plans and policies will be implemented during the next few months.

VTG UK will be nominated to manage the Megafrets under VTG AG's ECM Safety Management System (SMS). The effect of this change will mean that the UK domestic Megafrets will be managed in the same way that the existing VTG UK's fleet is managed. The UK SMS is fully audited and understood by the ORR under our ECM certification and any required communication of safety related defects will be carried out either directly with the relevant stakeholders or through the UK NIR system.

VTG UK can confirm that it has been in full communication on this subject with VTG AG. VTG AG are also taking considerable measures to deal with CPL issues, ongoing customer contracts and maintenance regimes following the purchase of ME. Various correspondence has been communicated to the ORR with regard to actions taken by VTG AG however, if the ORR would like understand further VTG would be willing to discuss.

7. VTG provided the following additional information on 9 January 2017:

The management of ongoing risk of centre pivot liners (CPL) is now completely under control. On the liners that have not yet been replaced we have special ongoing in field checks to ensure safety. I have provided a CPL summary to the actual position of all IKA wagons in the UK and I would be grateful if section 4 reflects this position and the fact that VTG UK have full control of the situation and have had for some time. The element of our re-write of maintenance plans is factually correct, full implementation of the new plans will be complete by June 2017.

For the long term our maintenance plans reflect suitable periodicities to ensure that CPL liners will not wear beyond useable limits.

Recommendation 2

The intent of this recommendation is to improve the management of risk posed by wagons operating in service after a systemic fault has been identified.

VTG AG should review, and update as necessary, the processes that will apply if a systemic defect is identified with a former AAE wagon (paragraph 137). The processes should ensure that the risk of continued fleet operation is understood and any necessary mitigation measures put in place to reduce it to an acceptable level. It should also provide for adequate communication of safety related information to all other owners, operators and maintainers.

ORR decision

8. VTG UK will from now manage the Megafret fleet in line with the rest of their UK based wagons. If systemic defects are identified the issue will be raised with relevant stakeholders or shared using the NIR system. If a systematic defect is found on the VTG Megafret fleet operating in mainland Europe, relevant information would be communicated via VTG AG to VTG UK.

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

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

Status: Implemented.

Information in support of ORR decision

10. In their letter of 11 April 2016, VTG UK provided the following information in response to recommendation 2:

> *VTG UK will be nominated to manage the Megafrets under VTG AG's ECM Safety Management System (SMS). The effect of this change will mean that the UK domestic Megafrets will be managed in the same way that the existing VTG UK's fleet is managed. The UK SMS is fully audited and understood by the ORR under our ECM certification and any required communication of safety related defects will be carried out either directly with the relevant stakeholders or through the UK NIR system.*

11. VTG provided the following additional information on 9 January 2017:

> *VTG UK can confirm that the implementation of recommendation 2 is now complete and UK vehicles are now under the UK SMS, including reporting systems and have been for some time. If a systematic defect is found on the European fleet then this would be immediately communicated via VTG AG to*

VTG UK through our internal communication channels. Any relevancy to the UK will be notified through the UK NIR system which would be the case for any vehicle type.

Recommendation 3

The intent of this recommendation is to improve the standard of maintenance of two-levelled switches and crossings (S&C) by Network Rail maintenance staff by making them more aware of the presence and significance of two-levelling and by providing them with the drawing(s) showing correct design configurations.

Network Rail should review, and update as necessary, its S&C training course(s) to confirm that there is adequate coverage of two-levelling of S&C. It should ensure that S&C maintenance staff who undertake maintenance of two-levelled S&C are competent to identify and maintain two-levelled S&C. In addition, Network Rail should introduce a system to make the necessary information available to enable correct maintenance of two-levelled S&C (paragraph 135b). The knowledge, skills and experience required to ensure that two-levelled S&C can be maintained competently should be made explicit within Network Rail's competency management system. The competency requirements should cover all staff likely to be involved in planning, executing and supervising the maintenance of two-levelled S&C.

ORR decision

12. Network Rail have submitted a time-bound plan to implement the recommendation, but have not yet substantially delivered the plan and have not provided any information on how they are managing the risk of incorrectly maintained two-level S&C contributing to derailment risk in the meantime.

13. To manage the risk until the plan is delivered, ORR has asked Network Rail to identifying those individuals who are required to do maintenance on S&C (particularly two-levelled S&C) and make arrangements to ensure they have been trained and briefed with specific reference to the process for two-levelled S&C by a competent person. In order to demonstrate this and ensure consistency of future training, we would expect Network Rail to retain records of the training/briefing material. ORR wrote to Network Rail on 7 October 2016 requesting this information.

14. 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 provided a time-bound plan setting out how it will be delivered.

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

Information in support of ORR decision

15. On 18 July 2016 Network Rail provided the following initial response:

There are 3 workstreams to meet the requirements of the recommendation:

1. Training & Competence

A review of two levelling is being undertaken with Network Rail's Professional Development & Training to check current courses for content on two levelling. Initial assessment indicates that information is included in module TR4 of track training and needs to be updated to include more detail. The Track Competence Delivery Group, who are responsible for oversight of track related training, have agreed that a new training module is required. An exercise to identify staff that are likely to require the competence will also be completed. This is planned to be completed within the wider role based competency programme.

– Target date June 2017

2. Awareness

The details and the underlying cause of the Washwood Heath derailment have been briefed to the Track Asset Technical Review (ATR) at the Quarterly Track Governance meeting and have been included in some detail in the S&C Module for the TME course (the delivery of which is ongoing). The brief to the TLG was for onward cascade to each DU, TME and their staff.

- ***Action Completed***

3. Records & Identification of assets

All 1:50 drawings of two level layouts are required to contain a drawing of the layout which states the baseplate designation at each position for all bearers. Two level baseplates are identified by the designation eg 'T20' for 20mm two level baseplate, at each position on the 1:50 drawing. A table is also provided solely for identifying the two level baseplates fitted on each rail of each track where two levelling is used. This applies to newer layouts where 1:50 drawings are available, but for older legacy layouts there may not be a 1:50 drawing available.

A SIN is to be issued in July 2016, with completion by March 2017. The purpose is to create a register of all two levelled sites, inspection of each site

to check all the baseplates are correctly installed, check that drawings are available and obtain them from suppliers if missing. The SIN will also require that DUs clearly mark (physically on the asset) all two levelled sites in track.

Target date: April 2017