

Oliver Stewart
RAIB Recommendation Handling Manager
T: 020 7282 3864
M: 07710069402
E-mail oliver.stewart@orr.gov.uk

14 October 2020

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 on 23 March 2015

I write to provide an update¹ on the action taken in respect of recommendation 1 addressed to ORR in the above report, published on 11 January 2016.

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 1 is **'Implemented'**.

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 15 October 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 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

1. VTG has completed the replacement of centre pivot liners across the AAE Megafret fleet and revised maintenance instructions so centre pivot liners are now replaced when the wheelset is changed, or every 2 years. The revised maintenance instructions are based on the wear characteristics of the newly introduced Railko NF21 centre pivot liner.
2. After reviewing the information provided ORR has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, VTG has:
 - taken the recommendation into consideration; and
 - has taken action to implement it

Status: Implemented.

Previously reported to RAIB

3. On 10 January 2017 ORR reported the following: *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.*

Update

4. VTG RAIL UK Ltd provided the following update on 2 October 2020:

I can advise that VTG Rail UK completed the change out programme of the centre pivot liners on the IKA Megafret wagons in 2017 and during the change out programme we replaced the original European 'Fagal' liners with the preferred 'Railko NF21' liners. For information we managed the initial 'risk' by carrying out a complete fleet check in accordance with our safety critical engineering instruction (VTG ENG SC EI-020).

Also during 2017, we changed the maintenance regime to include an event we call 'SU30' which requires the centre pivot liners to be inspected but also renewed, the frequency of this event is either 'at lift' during a wheelset exchange or at a back stop of 2 years. We also updated our maintenance instructions to ensure that only 'Railko NF21' liners are to be used going forward.

Since doing this work, the feedback from experience of our maintenance contractors is that the Railko NF21 liners are still in very good condition when they are being replaced (not broken or cracked) and that they are not showing any signs of any excessive wear (in fact they would pass the original inspection criteria) but we are still renewing them at this frequency as it currently ties in with wheelset wear/replacement.

Previously reported to RAIB

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

1. 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.

2. 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

3. 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.

4. 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.