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OFFICE OF RAIL REGULATION

5 December 2013

Ms Carolyn Griffiths
Chief Inspector of Accidents
Cullen House
Berkshire Copse Road
Aldershot
Hampshire GU11 2HP

Dear Carolyn

RAIB report: Uncontrolled freight train run-back between Shap and Tebay, Cumbria

I write to provide an update on the consideration given and actions taken in respect of recommendations 1, 3 and 4 addressed to ORR in the above report published on 15 August 2011.

The annex to this letter provides detail of the consideration and actions where all three recommendations are reported as 'in progress'. We expect to be able to update you on recommendations 1 and 3 by 31 August 2014 and recommendation 4 by 30 June 2014.

Yours Sincerely

Chris O'Doherty

Introduction

1. On 17 July 2012 we reported to RAIB that recommendation 2 had been implemented and that recommendations 1, 3 and 4 were in progress. Detail of further consideration and actions taken in relation to recommendations 1, 3 and 4 are provided below.

Recommendation 1

The intention of this recommendation is for DB Schenker to reduce the number of shifts that cause fatigue. This recommendation may apply to other freight train operating companies.

DB Schenker should, in consultation with its drivers:

a) identify the shifts on which their drivers experience high levels of fatigue, and give particular consideration to the impact on drivers working the first in a series of night shifts;
b) improve the identified shifts, for example by changing the transition to them, their duration and the duties carried out on them, with shifts of the highest risk improved ahead of those of lower risk;
c) assess the findings of drivers on the changed shifts to confirm that those shifts are improved; and
d) share its findings with the Office of Rail Regulation

Previously reported on 17 July 2012

2. We previously reported the following actions being undertaken by DB Schenker:

- DB Schenker had formed a bi-monthly Fatigue Risk Management Steering Group attended by the Senior Operations directors, Head of Risk Management, Head of Safety & Standards and the Safety & Compliance Manager (Construction) and a Fatigue Risk Working Group, including front-line representatives, with both groups feeding into the UK Board (Safety) Meetings;
- DB Schenker stated it would develop and implement a Fatigue Risk Management System (FRMS). They would review existing fatigue controls and develop them into a documented FRMS; develop systems for monitoring trends for safety critical staff working patterns and produce a procedure for comparing patterns with incident data, for feeding into the FRMS; and review other organisations' FRMS to learn from best practice elsewhere;
- DB Schenker safety staff were working with their IT department on the production of automated reports based on actual hours worked, to facilitate monitoring of nine likely fatigue precursors in working pattern features. This will be overlaid on incident data to identify any correlations;

- DBS had agreed with ASLEF Company Council that fatigue management will be a standing agenda item at their 2012 meetings, supporting the collaborative approach to fatigue and cultural improvements. DBS took a positive approach to releasing ASLEF representatives for the joint ORR/ASLEF fatigue training events in Nov/Dec 2011, in contrast to some other invited freight operators;
- DBS would continue to assess driving staff base rosters using FRI, to monitor driver working hours and to reinforce the message to drivers for them to be fully fit and prepared for duty. However, they recognised that FRI is just one source of information to be considered during their assessments of likely fatigue.

Update

3. DB Schenker (DBS) continue to progress recommendation 1 by its on-going development of a comprehensive Fatigue Risk Management System (FRMS). An overview of this work is given in the attached presentation (Annex B) which DBS presented to the 2nd Rail Industry Fatigue Management Forum on 7 June 2013.

4. DBS's joint Fatigue Working Group continues to meet monthly and has prepared a draft Company Fatigue Guidance Document. This will be reviewed by the Steering Group. DBS state that in September 2013 a new CEO for DB Schenker Rail (UK) was appointed, and in January 2014 a new company structure will be introduced. This will result in changes to the senior team structure, and therefore DBS have decided that the review by the Steering Group will take place in January 2014 once the new structure is in place.

5. The Fatigue Working Group has updated the Company Fatigue Reporting Form which is now in use and available for all staff to complete. Completed forms are reviewed by the management team, and appropriate action taken, and are also copied to all members of the Fatigue Working Group for review.

6. In addition DBS are currently looking at new rostering systems and potential replacements for Crewplan, and one of the areas being addressed is the desire for improved ability to incorporate fatigue management into these packages.

7. ORR will attend the first 2014 meeting of DBS's Fatigue Working Group to discuss FRMS progress and next steps with all parties. The dates of the Fatigue Working Group meetings are still to be confirmed.

ORR decision

8. ORR, in reviewing the response from DB Schenker, has concluded that in accordance with the Railway (Accident Investigation and Reporting) Regulations 2005, it has:

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

9. Parts a), b) and c) of the recommendation will be addressed by the DB Schenker Fatigue Risk Management System. ORR will continue to monitor developments; this will address part d) of the recommendation.

Status*: In progress, ORR will update RAIB by 31 August 2014*

Recommendation 3

The intention of this recommendation is to provide the rail industry with information on the accuracy of mathematical models used to predict fatigue.

The Office of Rail Regulation should arrange for a programme of work to analyse and compare existing mathematical models used to predict fatigue, including the Fatigue and Risk Index, and then provide information to the rail industry on the accuracy of those models.

Previously reported on 7 July 2012

10. We previously reported that we had submitted a research proposal to RSSB entitled 'A comparison of the ability of available mathematical models and tools to predict rail staff fatigue'. The outcome of the research was to be a report comparing how well the leading fatigue tools, including FRI, predict fatigue in staff working a range of representative rail working patterns, including in particular working patterns in the freight train driving role. It would include assessments of how well each of the selected tools predicts:

- subjective fatigue, as measured by a fatigue rating scale, and
- more objective measures of fatigue or its effects on performance and safety, measurement method(s) to be determined.

Update

11. Attached is the ORR Research proposal T1030 for RSSB (Annex C). Based on this proposal, with Operations Focus Group's (OFG) support, RSSB produced a draft T1030 Research Specification. We met RSSB on 16 July 2013 to discuss the draft research specification, RSSB have since considered and incorporated ORR's comments and at ORR's request copied the Research Specification (attached) to DB Schenker so that DBS and RSSB can liaise directly on what assistance and data DBS can provide for the work.

12. The business case for the proposal was agreed at a meeting of the OFG on 21 October 2013. RSSB plan to invite DBS's Head of Safety to become the industry champion for the work, which is likely to take a year or more.

13. The area of fatigue has links to work patterns, staffing levels, staffing costs, profitability, work life balance and trade union interests. These sensitivities require careful progress and can result in seemingly slow progress. ORR has been in regular contact with RSSB receiving assurances that that the project is making its way through industry processes, in addition we have updated RAIB directly by email on 30 April 2013 and 1 July 2013.

14. On 3 December 2013 we received the following update from the RSSB research project manager:

- The budget has now been agreed;
- The proposal went out to tender to 6 organisations (in GB, the USA and Switzerland) ON 26 November 2013. There are a limited number of organisations that with the necessary expertise to carry out this work and further complications arise from possible conflicts of interest if bidders already have their own fatigue tool. Two have confirmed they will bid, one has declined and three are still three deciding;
- The deadline for bids is 15 January 2014 and ORR will be invited to participate in the tender evaluation.

The target date for the award of the contract and the work to start is March 2014.

Status*: In progress, ORR will update RAIB by 31 August 2014*

Recommendation 4

The intention of this recommendation is to improve rail industry information on fatigue-related accidents and incidents.

RSSB should implement measures to improve the quality and quantity of available data relating to fatigue-related railway accidents and incidents. Options for consideration should include an enhancement of the Safety Management Information System to provide more accurate reporting of fatigue-related events.

Previously reported on 17 July 2012

15. We previously reported that RSSB had been looking to provide further information for its members on the causes of accidents and incidents through proposals for Incident and Human Factors causal classification.

16. RSSB and Network Rail had been working together to combine these proposals into a single cohesive causal classification module for inclusion within SMIS. The module had been specified, was being costed and was due to be implemented in SMIS in 2012. The module would contain a range of causal classifications, including the Network Rail '10 incident factors', and therefore would include fatigue. It was intended that causal classifications for all RAIB reports and formal Investigations would be recorded in the new SMIS module with RSSB completing the classification process for the RAIB and non-Network Rail formal investigations.

Update

17. The following information was provided by RSSB on17 January 2013:

RSSB can confirm that the software build of the Incident Factor Classification System (IFCS) was completed within SMIS in November 2012. During the period

January 2013 – March 2014, it will be populated by RSSB and the Network Rail Ergonomics team with data from accident and incident reports. Each report will be reviewed, summarised and classified into the IFCS. This 15 month period was chosen to allow sufficient time for the database contents to reach a meaningful sample size and for the collected data to be reviewed, analysed and presented to industry in a usable form. We intend to have reviewed and classified at least 300 accidents by February 2014 and propose to produce a set of deliverables summarising the data, including fatigue issues, from the IFCS and presenting its key findings by March 2014. This will be developed in collaboration with industry stakeholders. We are also working with RAIB on its potential use of the IFCS.

ORR decision

16. The RSSB project to implement the ICFS is on-going, including populating the system with relevant data and RSSB are keeping RAIB and ORR informed of progress. Industry search/output requirements for the system are expected to be developed by early 2014. We acknowledge that RAIB are actively working with RSSB to ensure there are links between its own Corporate Memory Tool and the ICFS. We will update RAIB by 30 June 2014.

Status: ***In progress, ORR will update RAIB by 30 June 2014***