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20 November 2012

Ms Carolyn Griffiths
Chief Inspector of Rail Accidents
Rail Accident Investigation Branch
Block A, 2nd Floor
Dukes Court
Dukes Street
Woking GU21 5BH

Dear Carolyn

Station overrun at Stonegate East Sussex

I write to report¹ on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 17 November 2011.

The annex to this letter provides details of the consideration given/action taken in respect of each recommendation where all 3 recommendations have been implemented.

We do not propose to take any further action in respect of these recommendations unless we become aware of an inaccuracy in what we have reported in which case I will write to you again.

We expect to publish this response on the ORR website on 3 December 2012

Yours Sincerely

Chris O'Doherty



INVESTOR IN PEOPLE

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 contained in the report were addressed to ORR when RAIB published its report on 17 November 2011.
2. After considering the report / recommendations we passed all 3 recommendations to London and Southeastern who provided its response on 30 November 2011. In addition, ORR issued an advisory letter to other Train Operating Companies and Freight Operating Companies bringing the lessons learned from the report to their attention.
3. Details of measures being taken to implement these recommendations are provided below.

Recommendation 1

The purpose of this recommendation is to ensure that safety related maintenance activities are managed effectively.

London & South Eastern Railway Ltd should carry out a management review to examine why the deficiencies in the processes for replenishment of sand had not been identified and rectified prior to the overrun at Stonegate. The lessons learnt from this review should be implemented by making suitable changes to management systems to provide confidence that such deficiencies will be identified in the future for all safety related maintenance activities.

Details of steps taken or being taken to implement the recommendation

4. In its response of 13 January 2012 Southeastern informed ORR:

We have conducted a management review of the processes for replenishment of sand. The Class 375 TCMS code 567 "10 minutes' sanding elapsed" was used to identify when trains began to run low on sand and inform sanding requirements. As this was maintenance information it was not subject to detailed scrutiny. Instead, the effectiveness of sand replenishment was monitored at high level through the annual Autumn Review. Our review of autumn 2009 had not identified any issues with sand replenishment processes and therefore they were not modified for 2010.

Following the incident at Stonegate we identified that this maintenance information could be presented to the driver in real time as a "low sand" warning and hence used to drive a more robust replenishment process. A software change was commissioned and implemented for the Autumn 2011 leaf fall season to deliver this information to the driver via a new code 573 warning on the driver's Individual Display Unit (IDU). This new warning is supported by instructions to drivers and other operating personnel, both on the IDU screen and in our Defective On Train Equipment List (DOTEL) which:

- *Prohibit a train from entering service if sand is low; and*

- *Require a train to be taken out of service and have its sand replenished in the event that a warning is received whilst in service*

We have also completed a wider review of management systems to identify any potential read across into other safety related maintenance activities. This has concluded that the processes for sand replenishment are unique in that this was the only safety related maintenance activity which involves replenishment which could be required to take place between scheduled exams and where a need for replenishment would not have been immediately apparent to the driver. We have therefore concluded that any issues relating to sand replenishment were not and are not common to other safety related maintenance processes

ORR decision

5. ORR, in reviewing the information received from London and Southeastern and having undertaken assurance concludes that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, London and Southeastern has:

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

ORR does not therefore propose to take any further action unless we become aware that the information provided above is inaccurate, in which case we will write to RAIB again..

Status: Implemented

Recommendation 2

The purpose of this recommendation is to ensure that missed work activities do not affect the safe operation of trains.

London & South Eastern Railway Ltd should introduce management systems to prevent trains that require safety related maintenance work from re-entering service until that work has been completed.

Details of steps taken or being taken to implement the recommendation

6. In its response of 13 January 2012 Southeastern informed ORR:

We have discussed the intention of this recommendation with RAIB and clarified that it relates to the introduction of software systems that link Equinox (the Engineering Management System) and Genius (the system used for allocating trains to diagrams) such that any train shown in Equinox as unserviceable cannot be allocated to a service by Genius. This link has been developed and testing has begun; full implementation is expected by mid-2012.

Management systems to prevent trains that require safety related maintenance work from re-entering service until work had been completed were already in place on Southeastern prior to the incident at Stonegate. As is common throughout the British rail industry, these processes required manual transfer of information between different data systems; in this case Equinox and Genius. However, no system, whether manual or electronic, would have prevented the Stonegate over-run because, at that time, there was no formal requirement to restrict the operation of trains which had registered TCMS code 567.

As noted, implementation of this recommendation was dependent on the final commissioning of automatic data links between Equinox and Genius, which has now been completed.

ORR decision

7. ORR, in reviewing the information received from London and Southeastern and having undertaken assurance has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, London and Southeastern has:

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

ORR does not therefore propose to take any further action unless we become aware that the information provided above is inaccurate, in which case we will write to RAIB again.

Status: Implemented

Recommendation 3

The purpose of this recommendation is to ensure that trains that rely on sand for braking in low adhesion conditions always have that sand available.

London & South Eastern Railway Ltd should review the arrangements and processes for train sand replenishment, so that they are compatible with known worst case rates of sand usage and take account of any inherent delays in actioning replenishment, and implement any revised arrangements arising from this review.

Details of steps taken or being taken to implement the recommendation

8. In its response of 13 January 2012 Southeastern informed ORR

As in previous years, we fully reviewed the experiences of past years and the potential risks to determine our regime for autumn 2011. We therefore implemented a substantially modified sanding regime for the season, which included monitoring of the amount of sand used to replenish trains. This revised regime included:

- *New driver-facing TCMS Code 573 “Low sand” warnings on all Electrostars, supported by a DOTEL instruction (as set out above*
- *Increased sand replenishment frequency of 3-5 days on all Class 375 Electrostar trains;*
- *Increased sand replenishment of the class 395 fleet by Hitachi and their contractors such that around 60% of the fleet was replenished each day; and*
- *Doubling the frequency of sanding on all Networker trains (Classes 465 and 466) from every 5000 miles to every 2500 miles*

Together these changes are compatible with responding to the worst known rates of sand usage experienced in 2010 and minimising delays in carrying out any required replenishment activities.

Full analysis of the information collected in 2011 will be completed in early 2012 and will inform the arrangements we will make for autumn this year. Early indications are that the revised regime for 2011 was probably excessive compared with the risk; there was only one “low sand” warning given during the leaf fall period and most sand replenishment involved less than 15kg (33% of the capacity of the smallest sand hoppers on our fleets) being added to each sand hopper. We will continue to review emerging results to inform our sanding policies going forward, and these will continue to be designed to comply with relevant Railway Group Standards and reduce the risk of sand depletion so far as is reasonably practicable.

ORR decision

9. ORR, in reviewing the information received from London and Southeastern and having undertaken assurance has concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, London and Southeastern has:

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

ORR does not therefore propose to take any further action unless we become aware that the information provided above is inaccurate, in which case we will write to RAIB again.

Status: Implemented