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27 January 2014

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

Dear Carolyn,

**Collision between an articulated tanker and a passenger train at Sewage Works Lane user worked crossing, near Sudbury, Suffolk, 17 August 2010**

I write to provide an update<sup>1</sup> on the consideration given and action taken in respect of recommendations 2, and 5 addressed to ORR in the above report, published on 11 August 2011.

The annex to this letter provides details of the consideration given/action taken in respect of each recommendation where the status of:

- Recommendation 2 is 'In –progress'. We expect to update you on progress by 31 July 2014; and
- Recommendation 5 is 'Implemented '. We do not propose to take any further action in respect of this recommendation unless we become aware that any of the information provided becomes inaccurate, in which case I will write to you again<sup>2</sup>.

We will publish this response on the ORR website on 12 February 2014.

Yours Sincerely

Chris O'Doherty

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<sup>1</sup> In accordance with Regulation 12(2)(b) of the Railways (Accident Investigation and Reporting) Regulations 2005

<sup>2</sup> In accordance with Regulation 12(2)(c)

## **Recommendation 2**

*The intent of Recommendation 2 is for Network Rail to consider ways of managing the predictable risk that arises at user worked crossing equipped with telephones where long waiting times are frequently experienced by road users.*

Network Rail should consider ways of managing the risk at user worked crossings equipped with telephones where long waiting times can arise as a result of the signaller having no means of knowing where trains are located, and implement any reasonably practicable measures identified.

### **Brief Summary on what was previously reported to RAIB on 15 February 2013**

1. We previously reported the information below to RAIB:

*The Sudbury TAWS trials were on-going. An extension to the Trial Certificate for Phase 1 to allow for the Product Approval process was granted in October 2012.*

*An extension was required because further evidence was required from the tests and the evidence from October 2012 onwards is being presented in a standard format. A DPE (Designated Project Engineer) was brought in to the project team to endorse and approve the certification and documented evidence.*

*Network Rail was in the process of establishing the Safety Criteria for Phase 2, which provides automated information to the user of the level crossing, and a workshop to agree and establish the criteria was set for 9 January 2013. This is a requirement from the Anglia Assurance Review Panel, from which the project Sponsor will seek Product Acceptance.*

*The GPS based solution currently being trialled on the Sudbury to Marks Tey branch line is an innovative and bespoke solution. There are alternative products and systems now available which may provide alternatives to GPS technology which offer solutions more appropriate in terms of safety, specification and cost. Network Rail is investigating these in relation to the current site list identified for CP4.*

*... An OJEU [Official Journal of the European Union] Evaluation of an additional list of suppliers who also provide technology solutions for train detection at level crossings was planned for 10 and 11 January 2013. The Output Requirements Specification for the 200 sites was to be provided at the end of February 2013 and the project would enter into Feasibility and Option Selection with a target of completing this stage by the end of August 2013.*

*The detailed design and implementation phase of the project was then due to commence with the aim of delivering the Client endorsed requirements by the end of CP4 [2014].*

### **Update**

2. On 25 October 2013, Network Rail advised ORR that:

*Five Suppliers have been selected from the OJEU to progress. The project has progressed to Stage-Gate 3 and is due to start GRIP 4 [Governance for Railway Investment Projects / 4 Single option development] imminently. The project team are on-board, with investment being sourced in October 2013 to progress to trials. The technology solutions are at the following stages:*

- *Ebigate 200 (Bombardier) - product accepted for non-electrified lines and progressing towards trials for electrified lines;*
- *WaveTrain – currently being trialled in Anglia Route and aims for product acceptance by December 2013;*
- *Schweizer – supplier compliance returned and progressing to trials;*
- *Eric Wright - supplier compliance returned and progressing to trials; and*
- *Rhomberg Rail - supplier compliance returned and progressing to trials.*

*The target for all technologies that have entered the product approvals process in May 2013 is to achieve product acceptance by March 2014.*

*A feasibility study was completed in June 2013 to convey if the technologies that had already been product accepted or expecting product acceptance within the near future, were viable to roll-out to 227 sites nationally by March 2014. A robust programme was created and it was determined that it was not feasible to achieve roll-out within this Control Period and the focus of the project should be on achieving product acceptance for a suite of solutions that Network Rail route teams can deliver in Control Period 5 [2014-19].*

3. On 19 December 2013 Network Rail advised ORR in relation to the GPS Train Activated Warning System (TAWS) being trialled on the Sudbury branch as follows:

*All on-board equipment is now installed (14 trains operational) and ready for commissioning. However, it is not possible to operate the equipment permanently in the IECC using the current 3G system so a separate ADSL line is now being installed. This installation is being managed by the IECC staff and once completed (expected before Christmas) it will be possible to complete the final commissioning within 15 days.*

4. Network Rail has yet to confirm the permanent commissioning of the Sudbury Branch GPS train location technology. It is anticipated that once this has happened, this GPS technology will become available alongside the five innovative solutions above, for specification by the Routes. ORR is actively pursuing discussions on this point.

It should be noted that ORR understands that the automation of user warnings using trainborne GPS location technology has not been progressed by Network Rail and ORR is seeking to fully understand the reasons behind this.

### **ORR Decision**

5. After reviewing all the information received from Network Rail, ORR concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:
- taken the recommendation into consideration; and
  - is taking action to implement it.

ORR recognises the amount of work and time that is required for the satisfactory introduction of new technologies to reduce risk on the rail network. ORR notes the proposed actions and timescales relating to the 5 new technologies outlined above and will monitor delivery, as well as pursuing discussions regarding the potential roll out of the GPS train location technology trialled on the Sudbury branch. ORR will provide RAIB with an update by 31 July 2014.

**Status: In progress.** ORR will update RAIB by 31 July 2014

## **Recommendation 5**

*The intent of Recommendation 5 is for Network Rail to review the costs and benefits of combining the data gathering, processing and assessment roles for level crossing risk assessment, taking account of the possible benefit of one person or a dedicated team having all the necessary knowledge to make an accurate assessment of the risk.*

Network Rail should review its level crossing management processes to establish the costs and benefits of making data gathering, processing and risk assessment of a level crossing the responsibility of a single person or a dedicated team with a comprehensive understanding of the operating environment at that crossing, and make changes to those processes as appropriate in the light of the outcome from the review.

### **Brief Summary on what was previously reported to RAIB on 24 September 2012**

*This recommendation was due to complete 31 May 2012, with the introduction of dedicated Level Crossing Managers [LCMs], making the data gathering, inspections and risk assessment of a level crossing the responsibility of a single person.*

*However, as rollout was on a phased basis through to 31 December 2012, the completion date was revised to 31 December 2012. Phase 1 saw 1 route- Scotland introduce a dedicated resource 31 May 2012. Anglia was due to go live end August 2012 and remaining routes were to retain current arrangement until after the Olympics with roll out expected by end November 2012.*

### **Update**

6. On 25 October 2013, Network Rail provided ORR with a copy of its 'Closure Statement' advising that:

*Network Rail has reviewed its level crossing management processes and established the costs and benefits of making data gathering, processing and risk assessment of a level crossing the responsibility of a single person as part of our level crossing safety improvement programme delivering a new operating regime.*

*Level Crossing Managers were implemented in Scotland in May 2012. The implementation of the LCMs is part of a suite of 18 risk management projects supporting the implementation which includes a bespoke training programme and tools to improve the risk assessment process.*

*The LCMs will develop a comprehensive understanding of the operating environment at the circa 70 crossings in their patch and perform both the data gathering and risk assessments for their crossings.*

### **ORR Decision**

7. Level Crossing Managers were appointed in Scotland in May 2012 before being rolled out across all routes; there are currently 100+ level crossing managers in post who are responsible for designated level crossings. All have

undertaken training on data gathering, ALCRM assessments and inspection of level crossings.

8. After reviewing all the information received from Network Rail, ORR concluded that, in accordance with the Railways (Accident Investigation and Reporting) Regulations 2005, Network Rail has:

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

ORR will write to RAIB again if it becomes aware that the information above is inaccurate.

**Status: *Implemented***