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27 February 2013

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

**Passenger accident at Brentwood Station, on 28 January 2011**

I write to report<sup>1</sup> on the consideration given and action taken in respect of the recommendations addressed to ORR in the above report, published on 28 November 2011.

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

- Recommendation 1 is being implemented, with a target date of 31 March 2013; and
- Recommendations: 2, 3, 4 and 5 have been implemented.

We do not propose to take any further action in respect of these recommendations 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 expect to publish this response on the ORR website on 13 March 2013.

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)

## **Initial Consideration by ORR**

All 5 recommendations contained in the report were addressed to ORR when RAIB published its report on 28 November 2011.

After considering the report / recommendations, on 6 January 2012, ORR passed:

- Recommendations 1 to Network Rail and train operating companies who operate Driver Only Operation (DOO) trains;
- Recommendation 2 to the Rail Safety and Standards Board; and
- Recommendation 3 to 5 to National Express East Anglia and copied to Abellio Greater Anglia as it will operate the franchise from 3 February 2012.

asking them to consider and where appropriate act upon them.

Details of consideration given and any action taken, in respect of these recommendations are provided below.

ORR also brought recommendation 1 to the attention of London Underground Ltd, London Overground infrastructure, Nexus and DB Regio Tyne and Wear Ltd as it was concluded that that there are were equally important lessons for them. ORR did not ask these organisations to provide a reply.

## **Recommendation 1**

*The purpose of recommendation 1 is for Network Rail, in partnership with relevant train operating companies, to make improvements to the assessment of DOO [Driver Only Operation] train dispatch arrangements at unstaffed platforms.*

*The assessment should consider the equipment provided and the way in which it is used. The involvement of both infrastructure owner and train operator is necessary in order to obtain the maximum benefit from such an exercise.*

Network Rail should arrange, execute and accurately record, in partnership with relevant train operating companies, periodic assessments of the DOO equipment provided at unstaffed platforms with particular reference to the quality of the interface between the equipment provided and the way in which it is used.

### **Details of steps taken or being taken to implement the recommendation**

1. **Network Rail** in its initial response on 20 March 2012 advised that:

*Each of the Route Communications Engineers (RCEs) has been requested to confirm that they have uploaded all of the requirements of Company Standard NR/L2/TEL/30072 [Specification for the Maintenance of DOO(P) CCTV,*

*Guard-Assisted CCTV and DOO Mirror Systems](including the DOO Cab Rides) into Ellipse.*

*This has been completed for Anglia and it is expected to be complete for all the other Routes by 29 February 2013. The actual activities resulting from this are on-going.*

*On Anglia Route, the Route Asset Manager S&T (Anglia) is working with the Route Safety Improvement Manager (RSIM) to review the contents of NR/L2/TEL/30072 to understand if there are any additional requirements that would be beneficial should a separate joint TOC/Network Rail risk assessment be required. This will be discussed with National Express to see how this can include stepping distance information/assessment.*

*The output from the review on Anglia will be shared with the National Telecoms Asset & Performance Manager and if required, consideration will be given to updating Company Standard NR/L2/TEL/30072.*

*Timescale: Uploading of requirements 29 February 2012. Review whether update to standard required 31 July 2012*

2. ORR was not satisfied that the initial response from Network adequately addressed the recommendation. ORR therefore wrote to Network Rail on 29 May 2012 requesting that it advise ORR if the RCE's have uploaded all of the requirements of Company Standard NR/L2/TEL/30072 into Ellipse.
3. The recommendation also asks that Network Rail should work in partnership with relevant train operating companies. This seems to be partly covered in NR/L2/TEL/30072 Annex D 'System Monitoring', which requires cab rides to check functionality preferably with the attendance of a representative of the train operating company.
4. As the recommendation requires Network Rail in **partnership** with relevant train operating companies should execute and accurately record periodic assessments of DOO equipment provided at unstaffed stations. ORR did not consider that Network Rail's response explicitly described how it works in partnership with the relevant train operating company. ORR therefore asked Network Rail for details on how it is addressing this.

5. Network Rail in its response on 26 November 2012 advised that:

*The uploading of requirements of Company Standard NR/L2/TEL/30072 (including the DOO Cab Rides) into Ellipse was completed 29 February 2012.*

*All of the Route Communication Engineers (RCE) have advised that where Driver Only Operation (DOO) CCTV is in operation, the requirements of NR/L2/TEL/30072 are being undertaken including cab rides.*

*With respect to the cab rides there are some differing methods of achieving these, as although most are planned, some routes are utilising specific test trains and others are using scheduled services. This does mean that some*

*scheduled tasks are subject to re-planning to fit in with the availability of services but are remaining compliant.*

*As regards enhancement of the company standard NR/L2/TEL/30072, inclusion of the word 'Mirror' to Annex D of NR/L2/TEL/30072, will be made.*

*Target date: 31 March 2013 or the end of the Standards Moratorium (if later).*

## **ORR Decision**

6. After reviewing information received from Network Rail and train operating companies, ORR has 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 will write to RAIB it becomes aware that the information above is inaccurate.

**Status: Network Rail is taking action to address the recommendation**

## **Train Operating Companies responses**

7. **Abellio Greater Anglia Ltd** (Previous franchise: National Express East Anglia) in its initial response on 10 May 2012 advised that:

*Greater Anglia will work in partnership with Network Rail when it undertakes periodic risk assessment reviews of DOO equipment*

*Once Greater Anglia local risk assessments are complete, Greater Anglia will provide Network Rail with the relevant findings which highlight any risks associated with the location and use of DOO equipment.*

*Dates for joint cab rides have been already been agreed between Greater Anglia and Network Rail.*

**COMPLETION TARGET DATE: December 2012.**

8. ORR was not satisfied that the initial response from *Greater Anglia* adequately addressed the recommendation. ORR therefore wrote to *Greater Anglia* on 29 May 2012 requesting when *Greater Anglia* expects to complete its local risk assessments and what arrangements it has in place to carry out periodic assessments of the state of the DOO equipment provided at unstaffed platforms with particular reference to the quality of the interface between the equipment provided and the way in which it is used.

9. Greater Anglia in its response on 15 July 2012 advised that:

*Following a review of how train dispatch is managed, Greater Anglia will be embarking on a programme to review all local train dispatch risk assessments in compliance with new SMS requirements. This will begin in September with a target completion date of 31<sup>st</sup> December 2012. Once our local risk assessments are complete Greater Anglia will provide Network Rail with the relevant findings which are related to any risks associated with the location and use of DOO equipment.*

**COMPLETION TARGET DATE:** 31<sup>st</sup> December 2012.

*Greater Anglia has undertaken its own review of all its stations with regards the position of stop car marker in relation to DOO monitors and mirrors.*

*In relation to ORR's mention of achieving compliance with NR/L2/TEL/30072 [Specification for the Maintenance of DOO(P) CCTV, Guard-Assisted CCTV and DOO Mirror Systems] regarding TOC representation, joint Greater Anglia and Network Rail DOO cab rides to enable monitor equipment checks have been agreed for both daylight and night assessments, initial assessment have taken place at Brentwood on the 21<sup>st</sup> March and between Stratford and Southend on 28<sup>th</sup> March. Daylight assessments at Bethnal Green to Cambridge were completed on the 15<sup>th</sup> June 2012, Stratford to Manningtree was undertaken on 29<sup>th</sup> June 2012. Future rides are planned for Rectory Road – Enfield Town – Cheshunt 20<sup>th</sup> July and Shenfield – Prittlewell 27<sup>th</sup> August, dates for other areas will be agreed with Network Rail after the Olympics. A plan has been agreed for the night assessments to commence from October 2012 to be completed fully by December 2012.*

*Greater Anglia will continue to work with Network Rail. Greater Anglia managers and staff will assist Network Rail in complying with NR/L2/TEL/30072 by allowing our drivers and occupationally competent managers to work with Network Rail representatives during cab rides for DOO equipment assessments.*

10. **C2C Rail Ltd** in its initial response on 27 February 2012 advised that:

*Unlike the majority of DOO equipment installed at stations across the UK network, The DOO equipment installed on the C2C route was installed by C2C Rail Ltd and is maintained by C2C Rail Ltd.*

*C2C Rail Ltd has in place arrangements for regular review of train dispatch risk assessments at all stations on the C2C route which includes the DOO equipment installed at each location. DOO equipment is checked daily to ensure all equipment is operational and a fault reporting process is in place for drivers to report any defects with DOO equipment.*

11. **Chiltern Railway Company Ltd** in its initial response on 27 February 2012 advised that:

*Chiltern Railways, in partnership with Network Rail will undertake an annual assessment of the DOO equipment provided at all relevant stations. The assessment will be conducted using a test train to verify the effectiveness of*

*the equipment at each station. The requirement for these assessment will be written into the Chiltern Railways dispatch procedure and results recorded with any necessary rectifications made.*

12. ORR was not satisfied that the initial response from Chiltern Railway Company adequately addressed the recommendation. ORR therefore wrote to Chiltern Railway Company on 29 May 2012 requesting a proposed timescale to deliver these commitments.

13. Chiltern Railway Company in its response on 2 August 2012 advised that:

*The test trains will be running on the 14th and 15th August. The requirement for undertaking the test train has already been written into the procedure.*

14. **First Capital Connect Ltd** in its initial response on 23 February 2012 advised that:

*First Capital Connect already has in place this requirement in its Safety Management System this is detailed in the current procedure FCC/SM/7.15 issue 2, which is currently being updated to issue 3.*

*The current requirement in issue 2 states "3 monthly inspection of DOO station equipment (Network Rail), Network Rail will undertake 3 monthly inspections of all DOO related asset equipment. Where a possession is required to access non-station based equipment Network Rail will ensure that this is carried out".*

*The new requirement in issue 3 will be "Quarterly inspection of DOO station equipment, Network Rail will undertake 3 monthly inspections of all DOO related asset equipment. Where a possession is required to access non-station based equipment Network Rail will ensure that this is carried out. These checks can be carried out by means of a cab-ride. The requirements of these checks are shown in Network Rail Line Standard NR/L2/TEL/30072" [Specification for the Maintenance of DOO(P) CCTV and DOO Monitor Systems].*

*Any faults that are identified for whatever reason/check/inspection are reported to the Network Rail Signaller and entered on the Network Rail Fault Desk (ELLIPSE).*

*ELLIPSE is also the Network Rail Management tool for work schedule planning to ensure that these checks take place within the planned frequency.*

*As the method of inspection is by means of cab-ride then the users drivers (users) opinion is taken in to consideration on the quality of the equipment provided.*

15. **First Great Western Ltd** in its initial response on 2 March 2012 advised that:

*DOO operation is only relevant to the area which First Great Western designates as the East Region. Therefore the responses apply to that area of First Great Western. In summary First Great Western has taken the following actions;*

*First Great Western Ltd has set up a DOO Working Group involving Network Rail and First Great Western local Operations, Station and Competence Managers. This Group reviews any issues raised with DOO equipment at our Stations and puts actions in place to remediate them.*

*First Great Western Ltd has also actively involved in the DOO equipment upgrade at a number of First Great Western stations and have project managers designated to lead the interface with Network Rail.*

*In addition First Great Western Ltd carry out a minimum of 2 DOO unobtrusive monitoring exercises at stations where DOO equipment is in place to ensure compliance with arrangements. This is also part of our competence management system.*

16. ORR was not satisfied that the initial response from First Great Western Ltd adequately addressed the recommendation. ORR therefore wrote to First Great Western Ltd on 29 May 2012 requesting a more detailed explanation on how First Greater Western Ltd will carry out periodic assessments of the state of the DOO equipment provided at unstaffed platforms with particular reference to the quality of the interface between the equipment provided and the way in which it is used.

17. First Great Western in its response on 31 August 2012 advised that:

*18. First Great Western Ltd regularly liaises with the Network Rail project team on the replacement works for the DOO equipment and discuss any on-going issues with the existing equipment but First Greater Western Ltd only share monitoring at look back stations. Monitoring of equipment is carried out by drivers, reported if faulty and also checked on ride assessments by managers. First Great Western Ltd has requested a joint process check with Network Rail to meet and undertake joint monitoring in accordance with its standard. First Great Western Ltd is actioning this through its established liaison meetings with Network Rail.*

19. First Great Western in a further response on 13 September 2012 advised that:

*20. Network Rail has informed First Great Western Ltd that it has a plan to monitor all DOO equipment where there is an interface with First Great Western Trains over a twelve month period. Network Rail will do this from the driving cab.*

*21. Network Rail believes that this meets its internal standard on equipment monitoring. This is in addition to the monitoring that First Great Western Ltd has previously described that is being completed within First Great Western Ltd.*

22. **First ScotRail Ltd** in its initial response on 24 February 2012 advised that:

*First ScotRail note this recommendation applies to all D.O.O. operations whether stations are staffed or unstaffed.*

*It is First ScotRail's understanding, following a joint safety meeting with Network Rail on Monday the 20th February that Network Rail has not accepted this investigation fully and are currently seeking clarification with RAIB on this matter.*

*First ScotRail would ask ORR to note that during the upgrade and introduction of new viewing aids (monitors / mirrors) throughout Scotland Route, First ScotRail was fully involved in this process which included management inspection and end user / driver involvement.*

*In order to ensure that First ScotRail fully comply with recommendation 1 First ScotRail is presently engaging Network Rail to form a joint safety improvement plan in order to take this forward.*

*Additionally First ScotRail has received from Network Rail an outline programme for inspection of D.O. equipment within Scotland Route and confirm First ScotRail will be participating in this work.*

*First ScotRail has reviewed the Network Rail standard NR/L2/TEL/30072 Issue 2 [Specification for the Maintenance of DOO(P) CCTV and DOO Monitor Systems] and will work with Network Rail to develop a clear understanding of what actions both First ScotRail and Network Rail Scotland require to undertake to ensure this equipment is fully operational as designed.*

*First ScotRail note that from a TOC [Train Operating Company] perspective the standard indicates that First ScotRail's main contribution will be to assist in the system functionality check regime.*

*Presently First ScotRail has yet to agree a full plan with Network Rail on this matter however ScotRail will forward this to ORR when this is concluded.*

23. ORR was not satisfied that the initial response from First ScotRail adequately addressed the recommendation. ORR therefore wrote to First ScotRail on 29 May 2012 requesting a proposed timescale to agree a full plan with Network Rail.

24. First ScotRail in its response on 29 June 2012 advised that:

*First ScotRail has met with Network Rail in order to agree a joint procedure for assessment of DOO equipment at both staffed and unstaffed stations.*

*First ScotRail has built this into a joint safety improvement plan as detailed in its previous correspondence.*

*First ScotRail has commenced work to implement the actions within the joint safety improvement plan which is designed to address the contents of recommendation 1.*



**Heathrow Express Operating Company Ltd** in its initial response on 24 February 2012 advised that:

*Heathrow Express operates DOO passenger services (Heathrow Connect) on behalf of First Great Western Ltd between London Paddington and Hayes and Harlington stations (Services then continue into Heathrow airport but train dispatch risk is managed under Heathrow Express company processes and risk mitigation policies described in company work instructions HEXMS WI 106 A-D)*

*Heathrow Connect services have operated since 2005 and are formed by class 360/2 electric Multiple Units operating in fixed five car only formations.*

*All intermediate stations are operated by First great Western trains Ltd and whilst some stations do have staff in attendance during the course of the day they do perform any defined role affecting the dispatch or movement of trains, therefore their presence does is not recorded or considered in any local risk assessment exercises.*

*Currently Heathrow Express is both engaged and currently working with*

- *Network Rail (Infrastructure Owner)*
- *First Great Western trains (Infrastructure / asset operator)*

*To regularly review the operational risks associated with DOO (P) operation at those “unstaffed” stations served by Heathrow Connect train services within the LTV [London & Thames Valley] (Eastern) area this will include the following locations,*

- *Acton Mainline*
- *Ealing Broadway*
- *West Ealing*
- *Southall*
- *Hayes and Harlington.*

*Initially the next round of joint risk assessments involving all parties are planned for the following dates*

*27<sup>th</sup> February, 5 and 6<sup>th</sup> March 2012*

*Joint DOO assessments will be attended by Driver managers / Operating managers from the relevant groups.*

*The purpose of the assessments will be to review the effectiveness and suitability of the train dispatch equipment provided and to recognise and record any additional risk / hazards associated with each location.*

*This data will be included in forthcoming safety / refresher training events and will be included in any supplementary issues of our DOO operating instruction manuals.*

*And where relevant will be included in our line of route risk assessment documentation.*

*A comprehensive review / assessment of operational risks associated with the dispatch of Heathrow Express / Connect DOO train services from staffed locations was undertaken in 2010 and included the following locations*

- *Paddington*
- *Heathrow Central*
- *Heathrow Terminal 4*
- *Heathrow Terminal 5*

*A subsequent review of the assessments will be undertaken in the later part of this year with the details being supplied to both Network Rail and First Great Western.*

### **Subsequent / Additional Actions**

*In addition following the comprehensive review of train dispatch undertaken in the autumn of 2010*

*Heathrow Express has implemented a re-briefing program for train driving staff identifying both the generic and locally identified risks associated with train dispatch and the platform – train interface at those platforms served by Heathrow Connect train services.*

*As part of the briefing process train drivers are issued with a DOO operating instruction manual (HEXMS WI 108) which emphasises the correct train dispatch protocol and highlights the local risks associated with each platform served by Heathrow Connect services.*

*Drafts of the original assessments and DOO operating instructions have been circulated to both Network Rail and First Great Western.*

25. ORR was not satisfied that the initial response from Heathrow Express adequately addressed the recommendation. ORR therefore wrote to Heathrow Express on 29 May 2012 requesting if the risk assessments to have been carried out by 27<sup>th</sup> February, 5 and 6<sup>th</sup> March 2012 have been completed and to provide a brief summary of findings and any actions taken / to be taken (including any associated timescales).

26. Heathrow Express in its response on 12 July 2012 advised that:

*The Risk assessments were completed on the 6<sup>th</sup> of March and Heathrow Express has subsequently completed its Heathrow Connect DOO operating Risk assessments which Heathrow Express has forwarded to First Great Western for review / inclusion in its LTV summaries.*

*(Heathrow Express only considers the operating risks associated with Heathrow Connect services which are restricted to 5 car class 360 operations between Paddington and Heathrow only).*

*Heathrow Express provided ORR with a copy of the assessments for reference.*

*Currently the existing significant risks identified in the document (R2 [mitigated risk value] risks with a value of 6 or above) are being addressed, primarily by*

*enhanced awareness / refresher training programs for train driving staff undertaken as part of the 7 week refresher training program.*

*In summary Heathrow Express is:*

- *Increasing general driver awareness (As part of the refresher training process supported by the Heathrow Connect DOO handbook and the RED 28 DVD “Risk at the platform train interface”)*
- *Increasing Individual driver awareness and monitoring (As part of the face to face briefing process mandated by the Train Driver Competence Management Process)*
- *Undertaking Periodic meetings with FGW (LTV)*

27. **London and Southeastern Railway Ltd** in its initial response on 21 February 2012 advised that:

*London and South Eastern Railway Ltd (Southeastern) has reviewed the report and recommendations, and confirms that it already has processes in place with Network Rail to meet recommendation 1. These processes are as set out in Appendix D of Network Rail Level 2 Standard NR/L2/TEL/30072 [Specification for the Maintenance of DOO(P) CCTV and DOO Monitor Systems] issue 2 dated March 2009.*

*London and South Eastern Railway Ltd carry out two sets of cab rides per year using Southeastern rolling stock; one in daylight hours and one in darkness. Our most recent inspections were carried out on 28 August, 25 September and 2 November 2011, during which approximately 1500 monitors were assessed and 23 faults identified. The main faults found were dark/split screens as well as a small number of camera faults. All of these faults were rectified within the laid down timescales.*

28. **Southern Railway Ltd** in its initial response on 7 March 2012 advised that:

*There is in place, via level 2 meetings with Network Rail, an action to implement inspection, reporting, repair and maintenance of DOO equipment wherever fitted on the route. This is monitored at level 2 and via the reporting from train crew to our joint control on a day-to-day basis. This is supported internally at Southern where we have a joint ASLEF [Associated Society of Locomotive Engineers and Firemen] /Southern DOO Working Group who meet to advise on any issues arising.*

29. ORR was not satisfied that the initial response from Southern Railway adequately addressed the recommendation. ORR therefore wrote to Southern Railway on 29 May 2012 requesting a more detailed explanation on how Southern Railway carries out periodic assessments of the DOO equipment provided at unstaffed platforms with particular reference to the quality of the interface between the equipment provided and the way in which it is used.

30. Southern Railway in its response on 25 June 2012 advised that:

*There is in place, via Level 2 meetings with Network Rail, an action to implement inspection, reporting, repair and maintenance of DOO equipment wherever fitted on the route. This is monitored at Level 2 and via the reporting from train crew to our joint Control on a day-to-day basis. This is supported internally at Southern where it has a joint ASLEF [Associated Society of Locomotive Engineers and Firemen] /Southern DOO Working Group who meet to advise on any issues arising.*

*Effectively, the maintenance of DOO (as defined within the station lease annexes) is managed by the Route (Sussex) and (Kent – Norwood Junction to London Bridge) by the respective Route Communications Engineers. Both have teams working within the depots to support their delivery. Functional testing of the DOO equipment is undertaken 3 monthly and includes the following assessments:*

- Undertaking a system coverage check which includes a minimum walk through test accompanied by either comparison to reference pictures, and or the correct visual display of yellow painted diamonds on the platform*
- A review of all operational monitors to ensure they are displaying a clear picture (be it a mirror or CCTV).*
- Checking that all anti-glare coating is applied and functional.*

*The staff employed to do these activities are fully IRSE [Institution of Railway Signal Engineers] licensed and undertake the work as per the above requirement.*

*There is in place a process that requires ALL drivers of trains who are utilising DOO equipment to report ANY defect with the equipment or the process wherever they may encounter it. A recent example of this was when a roof was erected by a fellow TOC over a station shelter which obscured the rearmost doors on the platform monitor. This was reported by the driver and the structure removed within the hour, during which period trains reverted to platform dispatch provided by the station operator.*

*The form used for this DOO Equipment Failure Report Form S/OS/DOO/PLAT and the instruction is: This form must be completed in the event of a platform or in cab DOO equipment failures only and for no other purpose. It should be completed in full and prior to leaving duty on the day in question.*

*The report is received by Southern Control, who sit in adjacent to Network Rail Control, Southern has an agreed standard that the DOO equipment will be reinstated within 2 hours of the report and that if this is not possible platform dispatch is maintained until the fix is complete.*

*Thus Southern believes it has a process that continually monitors the equipment and allows users to report and control their safe activity around it and that issues so reported are known to Network Rail via the reporting system.*

*In addition to this Southern maintain a register/ matrix of all the DOO equipment by station, platform and type. This register is jointly maintained with Southern's ASLEF Driver's Functional Council colleagues and as station infrastructure develops or is changed agreed test trains are run along affected routes to check the suitability of the equipment. These are manned by ASLEF representatives and competent Train Driver Managers from Southern's Competency Development Management Team.*

*The Competency Development Managers ride trains on a 24/7 roster pattern to check train crew competence and develop driver skills. Within this remit they are also tasked with reporting on infrastructure, for example speed boards and the status of stop car marks, DOO equipment falls within this remit, Southern has completed over 9000 such rides in the last 12 months.*

*Where Southern is the station operator its PGI [Planned General Inspection] checks include the DOO equipment and this also includes cleaning regimes. Defects noted on PGI's are reported internally to Southern's Facilities team who then operate under the same timescales previously mentioned, and if the equipment is not serviceable then the driver notices are circulated advising drivers of the change of status of the equipment. If the area of maintenance falls within the contractually agreed responsibilities for Network rail this is passed to it for action.*

*At Level 2 the issues around the provision, maintenance and reporting of DOO equipment is reviewed and minuted and on occasion specialists are asked to attend and explain activity. These meetings are attended by Driver and Signaller representatives as well as the Safety Management teams.*

*Should it be required to run test trains to survey existing arrangements to confirm or examine any issue Southern have undertaken to provide this to Network Rail.*

## **Recommendation 2**

*The purpose of recommendation 2 is to reduce the likelihood of a train departing from a platform with a passenger in an unsafe position relative to the train.*

The Rail Safety and Standards Board should, in consultation with train operators, consider the inclusion of guidance in Rail Industry Standard RIS-3703-TOM [Rail Industry Standard or Passenger Train Dispatch and Platform Safety Measures] that those responsible for train dispatch (including the drivers of DOO [Driver Only Operation] trains) should, so far as is reasonably practicable, observe the closing of the train's doors and be alert for any dangerous occurrence while this is taking place.

### **Details of steps taken or being taken to implement the recommendation**

31. RSSB its response on 24 February 2012 advised that:

*After consultation with the industry-wide TOM [Traffic Operations & Management] Standards Committee at its 7 February 2012 meeting, RSSB would like to respond to Recommendation 2 of RAIB's investigation report into the Brentwood platform-train interface incident.*

*At its 7 February 2012 meeting, RSSB presented a paper outlining a change to Rail Industry Standard RIS-3703-TOM (Passenger train dispatch and platform safety measures) in line with the above recommendation.*

*RSSB had met with RAIB in September 2011 to discuss the draft report and recommendation. It was felt that the recommendation would not, in itself, address the underlying causes of the accident which have been identified as the alignment of the CCTV monitor in relation to the eight-car stop car board at Brentwood, systemic failures contributing to the non-reporting of the misaligned monitor and the failure to identify the risks arising from this, coupled with the driver attempting to undertake a train safety check after moving off.*

*However, it was thought that the opportunity should be taken to provide additional guidance within RIS-3703-TOM that would, through an extended period of train monitoring during the door close process, increase the likelihood of train crew observing a person falling between the platform and the train. This would encourage train crew to be especially vigilant during the 'door close cycle' which would provide additional mitigation against such accidents occurring in the future.*

*Although RIS-3703-TOM sets out factors for infrastructure managers to take into account when developing or reviewing the train dispatch process and/or identifying measures to manage passenger and public behaviour on station platforms, it also seeks to extend its scope by stating that 'railway undertakings who are responsible for developing their own train dispatch processes at stations operated by infrastructure managers may choose to adopt those parts of the document that apply to their operations'.*

*The guidance suggested by the recommendation seeks to raise the level of awareness of staff responsible for train dispatch (including drivers of DOO trains) during the period after the door close sequence has been initiated so that they are alert to potential dangerous occurrences whilst the doors are closing.*

*When considering current train dispatch arrangements, it is usual for train crew and train dispatch staff to increase the level of monitoring once the door close sequence has been initiated and, thus, the inclusion of further guidance is unlikely to present any significant increase in workload or present an increased risk of distraction due to monitoring the train whilst the doors are closing.*

*The RAIB report concludes that there were systemic failures that meant that it was not recognised that incorrect train dispatch processes were being applied by drivers. RSSB proposed, therefore, that additional guidance should also be*

*included within RIS-3703-TOM that makes a clear link to the training, development and monitoring of train dispatch staff during the door closure sequence.*

*A review of RIS-3703-TOM has concluded that the recommended changes would be best placed within clause 2.4, which currently reads:*

#### **2.4 Monitoring the train during train departure**

*When developing the train dispatch process, consideration should be given to any identified risks and the level of monitoring required by platform staff involved in train dispatch including, where practicable, watching the train as it is arriving and during all aspects of train departure.*

*Competence management systems should include the training, development and assessment of platform staff responsible for train dispatch which includes any required monitoring during train departure.*

*The intention of the RAIB recommendation could be fulfilled by adopting the following:*

*'When developing the train dispatch process, consideration should be given to the level of monitoring required during train dispatch, with specific emphasis on monitoring during the door close process. Such processes should be designed to mitigate the risk of staff involved in train dispatch failing to observe a person falling between the platform and the train or of observing potentially dangerous occurrences taking place.'*

*It should be noted that RIS-3703-TOM is due for a 12-month review in June 2012.*

*TOM SC approved the inclusion of the proposed wording to RIS-3703-TOM as RSSB's response to Recommendation 2 of the RAIB report into a passenger accident at Brentwood station on 28 January 2011. TOM SC approved that this change and any relevant outputs from the sponsored OFG [Operations Focus Group] review of station safety should be included in the 12-month review of RIS-3703-TOM and approved that the 12-month review may be delayed to encompass all the necessary changes.*

#### **ORR Decision**

32. After reviewing information received from RSSB, 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 taken action to implement it.

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

**Status: *Implemented***

### **Recommendation 3**

*The purpose of recommendation 3 is for National Express East Anglia to make improvements to its train driver training and assessment processes to promote effective management of the risk associated with DOO [Driver Only Operation] train working, and in particular, the dispatch of DOO trains from unstaffed platforms.*

National Express East Anglia should complete a systematic review and updating of its train driving task analysis relating to the dispatch of Driver Only Operated (DOO) trains from unstaffed platforms to assure that hazards are identified and the risk properly addressed.

The results of this review should be incorporated into the train driver training programme, train driver competence management system and on-going safety briefing processes to facilitate the changes necessary to adequately address the risk from DOO train dispatch, particularly from unstaffed platforms.

#### **Details of steps taken or being taken to implement the recommendation**

33. *Abellio Greater Anglia Ltd (Previous franchise: National Express East Anglia) in its initial response on 9 April 2012 advised that:*

*A full review of the risks associated with all methods of train dispatch is being undertaken. The outputs from this review will be used to undertake reviews of all relevant training and CMS [Competence Management System] related to the safe dispatch of trains. This review includes all grades of employees involved in train dispatch.*

34. ORR wrote to Abellio Greater Anglia on 30 April 2012 requesting a time scale to deliver its proposed actions.

35. Abellio Greater Anglia Ltd its response on 10 May 2012 advised that:  
*Completion target date: November 2012.*

36. Abellio Greater Anglia Ltd further advised on 10 May 2012 that:

*Abellio Greater Anglia has completed the high level risk assessment for Train Dispatch.*

*Abellio Greater Anglia the final versions of its new local train dispatch risk assessment and has updated its Safety Manual document which will become live in the [Safety Management System] SMS before the end of the year [2012].*

*The new local risk assessments will begin in January 2013.*

*[Competence Management System] CMS documentation has been updated and will be introduced in 2013. This was delayed slightly due to reviewing the impact of non-technical skills.*



*Key learning points:*

- *There is a strong need to undertake holistic review of risk related to train dispatch and not just focus on single stations in isolation.*
- *CMSs required reviewing.*
- *Industry documentation is in some instances vague and includes non-train dispatch related topics and these documents cannot be solely relied on. The risk assessment process is critical to meet the legal duty to have suitable and sufficient risk assessment for train dispatch.*
- *There was duplication of risk management in its SMS regarding platform infrastructure hazards and this has now been clarified following our SMS reviews.*
- *Training material will need to up-dated to reflect the findings of its train dispatch risk assessments.*
- *In addition Abellio Greater Anglia is strongly considering a new CMS to cover other items related to station safety which are included in industry documentation.*

**ORR Decision**

37. After reviewing information received from Abellio Greater Anglia, 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 taken action to implement it.

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

**Status: *Implemented***

**Recommendation 4**

*The purpose of recommendation 4 is for National Express East Anglia to take steps to improve the availability of data from the on-train CCTV [Closed Circuit Television] systems fitted to its trains.*

National Express East Anglia should take the necessary steps to ensure that the on-train CCTV systems (including forward and rear facing CCTV equipment) fitted to its trains achieve a high level of availability.

**Details of steps taken or being taken to implement the recommendation**

38. *Abellio Greater Anglia Ltd (Previous franchise: National Express East Anglia) in its initial response on 9 April 2012 advised that:*

*A modification programme is currently underway and the defective DVRs [Digital Video Recorders] are all being replaced. This work stream will increase the availability of CCTV for both in coach and forward/rear facing cameras.*

39. ORR wrote to Abellio Greater Anglia on 30 April 2012 requesting a time scale to deliver its proposed actions.

40. Abellio Greater Anglia Ltd its response on 10 May 2012 advised that:  
*Seventy-seven class 321 units and twenty class 315 units have now been modified.*

Completion target date: August 2012

41. Abellio Greater Anglia Ltd it an update response on 21 January 2013 advised that:

*Modifications to the Greater Anglia stock was completed in summer 2012 on the class 315 and 321 fleets. This has now resulted in a high level of availability of data from the on-train CCTV systems.*

*This is now a KPI measured in the periodic safety performance report.*

### **ORR Decision**

42. After reviewing information received from Network Rail, 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 taken action to implement it.

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

**Status: *Implemented***

### **Recommendation 5**

*The purpose of recommendation 5 is for National Express East Anglia to make improvements to its monitoring processes to ensure periodic reviews, such as risk assessment reviews, are undertaken at the specified frequencies.*

*National Express East Anglia should review and update as necessary its monitoring systems so that where periodic safety reviews are required they are undertaken at the necessary frequencies.*

### **Details of steps taken or being taken to implement the recommendation**

43. Abellio Greater Anglia Ltd (Previous franchise: National Express East Anglia) in its initial response on 9 April 2012 advised that:

*Section 4 of the SMS [Safety Management System] has been reviewed following this incident.*

*The specific SMS standard that details the risk control strategy for train dispatch activities will also be updated once the outputs from the train dispatch review are fully established.*

*A process for monitoring risk assessment review dates is now being explored to ensure that future internal time set reviews are not missed.*

44. ORR wrote to Abellio Greater Anglia on 30 April 2012 requesting a time scale to deliver its proposed actions.

45. Abellio Greater Anglia Ltd its response on 10 May 2012 advised that:  
*Completion target date: June 2012*

*Note: At formal consultation with RAIB it was questioned whether the recommendation referred to all periodic reviews, such as risk assessment, or just in relation to train dispatch. RAIB advised that it relates to all periodic reviews within NXEA's SMS in the recommendation. However, the recommendation does make reference to paragraph 138(c) in the report which is specific to 'dispatch risk assessment'.*

46. Abellio Greater Anglia Ltd in an update response on 21 January 2013 advised that:

*In relation to train dispatch, the focus has been on ensuring there is a compete revision of the methodology for risk assessment which will result in a Greater Anglia network wide review of the train dispatch arrangements.*

*The process has now been signed off by the Safety Executive Group and there is now a programme in place to complete the risk assessment reviews.*

*This will be prioritised in relation to stations with varying dispatch methods and directions of traffic on a risk based approach.*

*Review arrangements for risk assessments are detailed in the updated SMS document relevant to Train Dispatch and review of these assessments is subject to audit to ensure internally set review dates are not missed in the future.*

### **ORR Decision**

47. After reviewing information received from Abellio Greater Anglia, 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 taken action to implement it.

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

**Status: *Implemented***