

TOC sector reports and responses

Period: 01/04/2009 to 27/06/2009			
Prepared by	S. Beevor	Date of Version	18/08/2009
Checked by	C.Langer	Final Version	1.1

Contents

40694 Knowledge and experience of some managers in strike cover	3
40695 High pressure from the HVAC units in HSTs	3
40698 Concern over running 12 car 395 units without fully qualified staff	4
40728 Maintenance regime at National Express East Anglia questioned.....	6
40423 Hidden recommendations being breached	7
40420 Right Away indication given against a red signal.....	8
40400 Safety communications between Southern and Network Rail	9
40309 Concern over the fatigue index.....	10
40370 Loud volume of AWS bell and warning horn on class 357s.....	11
40612 Notice case at Southend Central not kept up to date	12
40693 Conductors not receiving 12 weekly safety briefings	12
40662 Incorrect fire extinguishers on the new voyagers and HSTs.....	13
40715 The use of train horn being gradually 'degraded'.....	14
40587 & 40597 IVRS black spots between Tapton and Wingfield.....	16
40673 DOO monitors and mirrors 'poorly placed' in Sussex	18
40731 Inadequate rest between shifts along the Windsor-Reading line	19
40717 Restricted emergency access into Bolton station from car park	20
40697 Match day arrangements and crowding at Cardiff Central.....	21
40705 Slippery mats at the top of the stairs at Bolton station.....	23
40664 Self dispatch at Liverpool Lime Street and Manchester Airport	23
40702 Ticket barrier operation at Waterloo station	24
40633 Timing of PNBs in metro drivers shifts.....	26
40666 Ban on varifocals whilst working.....	27
40674 Defective warning horns in snowy weather	28
40656 Signal sighting at Eastriggs sidings	29

40694 Knowledge and experience of some managers in strike cover

The knowledge and experience of some managers brought in to cover during strike action is being questioned by one reporter.

During strike action all managers, including driver managers, conductor managers, station managers and line managers are being asked to work trains. Although the driver and conductor managers may have the required knowledge and experience to work trains, the reporter is concerned that the station and line managers may not. Some of these managers have apparently been rushed through the PTS training and have been signed off on the route in just three days. Normally staff would receive training for three weeks before they are competent to be signed off on the route between Northampton and London Euston. There is also concern that these managers may not have received training on the rules.

The reporter's concern is that if some of the managers do not have enough route knowledge and experience to work the train that this could contribute to a safety related incident.

Could London Midland clarify whether all the managers being asked to work trains during action have received comprehensive route training and are adhering to the rules and regulations set by the company?

Response from London Midland

London Midland takes the issue of safety for its customers extremely seriously. As a consequence it has developed a robust training and assessment process for managers who may be called upon to work trains. This is laid down in our operational standards manual under '*Competence Requirements for Managers to Perform Train Working Duties – OPS 21*'. All managers who may be called upon to undertake these tasks are trained and assessed to these rigorous standards. The standard covers all aspects of train working including Route Competency, Traction Competency and Rules and Regulations Competency. Evidence of training and assessment for each of the competencies required is held on file and each file is individually verified by a member of the Operational Standards Department.

40695 High pressure from the HVAC units in HSTs

The heating, ventilation and air conditioning (HVAC) units on Class 43 high speed trains (HSTs) are a concern for one reporter. The pressure from the fans on these units is so high that it is known to cause irritation to drivers' eyes. There are no control settings on the HVAC units which would allow the drivers to reduce the pressure. The reporter is aware that many of the drivers have resorted to switching the units off in the driving cab.

The reporter feels that the drivers are in a 'no win' situation because if they leave the HVAC units on, the high air pressure affects their eyes and causes a distraction whilst they are driving the train. Also, the temperature during the winter months can drop inside the cab to ten degrees affecting the driver's concentration. However, if the drivers turn off the fan the driving cab becomes hot and stuffy, which could result in drivers feeling fatigued. This problem is exacerbated by the fact that there are no windows in the driving cabs of the Class 43 HSTs.

The resolution to this problem is simple according to the reporter. Each unit should have a variable switch on the fan – so that drivers can modify the pressure of the fans when necessary. Please comment on this suggestion.

Response from First Great Western

FGW is aware of this problem as it has been raised by drivers' representatives at the Problem Solving Group [PSG], a formal meeting that looks at drivers' and engineering issues with a remit to present potential solutions.

Another TOC has experienced similar problems, having used this HVAC system for longer than FGW, and has trialed a modified air outlet grille to deflect the conditioned air to the sides of the cab. This appears to have been successful. A similar grille is to be assessed statically at Laira depot by the drivers' representatives from the PSG meeting and, if suitable, will be trialed in service. This is planned for late June/early July.

Reducing the speed of the fan is not possible as Railway Group Standards require that driving cabs are provided with fresh air (which the air conditioning unit achieves) at a minimum volume per hour. To introduce a control that provides variability of this airflow to a lower volume flow rate would therefore infringe the applicable standard.

I hope this response assists your understanding and suitably advises the steps the company has taken to address this. The results of the trial using the modified grille will be communicated via the PSG.

40698 Concern over running 12 car 395 units without fully qualified staff

A reporter has expressed concern about the lack of safety critically trained conductors on Southeastern's new high speed train routes that will run to Kings Cross St Pancras from Dover and Ramsgate from December 2009.

The reporter states that Southeastern are going to introduce 12-car driver only operated (DOO) 395 units (which are comprised of two 6-car units without a walkthrough) on the new high speed service to St Pancras. In place of conductors, onboard managers will be employed who will not hold full safety critical qualifications.

The reporter states that the onboard manager will not be trained to deal with issues that occur outside of the carriage or train environment. The reporter believes passenger safety could be compromised as the on-board managers, in the event of an accident occurring, would not be qualified to go out and secure the track.

Also, the reporter takes issue with the new 395 train only having one member of staff on board a two 6-car unit. With no walkthrough between the two 6-car units, should a manager be in the front half with the driver, in the event of an incident there would be no member of staff available to help passengers in the second half of the train.

The reporter is aware that a skeleton and experimental service is going to be in operation from May 2009 to test the trains on the tracks. The reporter's opinion is that during this experimental stage a lesser-manned service should not be used so that passenger safety is not compromised.

Could Southeastern comment on the points made above?

Response from Southeastern

We thank the reporter for writing to CIRAS with their concerns about the method of operation of Class 395 Multiple Units.

Before dealing with the reporters specific concerns, we would like to assure readers that Southeastern and it's predecessor Train Operating Companies and formally British Rail, have been safely utilising Driver Only Operation (Passenger) for many years, today, 60 per cent of our services are operated in DOO(P). Many of these services operate safely formed of multiple-unit rolling stock with no through gangway connections (i.e. Class 465/466 Networker stock and Class 376 Electrostar stock).

In responding to your reporters concerns about Class 395, it is important to consider how we have approached this method of operation, this is summarised below:-

- A quantified independent risk assessment was undertaken to fully scope the changed risks, arising from the new trains, routes and stations that the service will operate;
- All relevant industry standards and rule books were examined to feed into the risk review;
- Previous industry risk evaluations of Driver Only Operation were examined.
- The Train design was designed to ergonomically enable modern and safe Driver Operation of the train doors utilising in cab CCTV which always provides close and perfect door observation, in addition, the train is equipped with door obstacle detection and a touch sensitive edging.
- This method of operation is not Driver Only Operation in the historic sense; we have defined this method as 'Driver Controlled Dispatch'.

The view taken by Southeastern, supported by the independent risk assessment was that Driver Controlled Dispatch was the safest method of operation.

In addition to this, we have been developing a new role called On Board Manager who will accompany the driver on every Class 395 train (and perform the *HS1 Rule Book* role of Evacuation Warden when 12 car trains operate), this is a modern and fit for purpose role that has defined safety responsibilities, these being :-

- To recognise and respond to on board emergencies.
- To support the driver in cases of emergency evacuation of the train.
- To utilise on train transportable equipment.

A full competency management system and training programme has been developed and we feel sure that the On Board Manager will be a very useful role in enabling excellent customer service and safety. The training and competency management system has been piloted with excellent feedback.

We at Southeastern feel very confident that our drivers and on board managers will work well together in introducing the first high speed domestic train service in the UK.

We hope that this answers your reporters concerns and will happily take any member of staff through the detailed risk management approach we have taken.

40728 Maintenance regime at National Express East Anglia questioned

A reporter fears that the current business climate is affecting maintenance standards at National Express East Anglia. He believes maintenance cuts mean work is being delayed, omitted or done to an unacceptable standard. It is felt that the maintenance regime as a whole should be investigated to help address any underlying problems that surface.

One particular incident – the exact details of which have been concealed – meant a primary suspension damper was never reinstalled before a train re-entered service. Though this was reported at the time, it is believed to be indicative of a wider problem that needs addressing at senior management level. The reporter suspects maintenance teams are overstretched and unable to carry out all the necessary checks.

Other related examples include:

- over 20 trains operating recently at half power because of a shortage of spares;
- approximately one in six 317 trains without a fully operational PA (public announcement) system; and
- train 317 653 with a missing handrail – and no repair book to report it in.

Could the response please focus on the reporter's assertion that the maintenance regime needs to be reviewed to ensure standards improve?

Response from National Express East Anglia

Due to the number of points raised NXEA has answered each point underneath rather than as a separate response.

A reporter fears that the current business climate is affecting maintenance standards at National Express East Anglia. He believes maintenance cuts mean work is being delayed, omitted or done to an unacceptable standard. It is felt that the maintenance regime as a whole should be investigated to help address any underlying problems that surface.

Whilst there have been some staff reductions throughout NXEA, these were kept to an absolute minimum in engineering with no direct reductions from the maintenance function.

One particular incident – the exact details of which have been concealed – meant a primary suspension damper was never reinstalled before a train re-entered service. Though this was reported at the time, it is believed to be indicative of a wider problem that needs addressing at senior management level. The reporter suspects maintenance teams are overstretched and unable to carry out all the necessary checks.

A driver identified that a primary damper was missing from a unit at Cambridge. This was reported and a technician was immediately dispatched from Ilford depot to attend the unit where a replacement damper was fitted. The incident has been fully investigated and evidence indicates that the damper was removed on maintenance and not refitted. To prevent reoccurrence staff have been briefed and additional in process checks have been put in place.

Other related examples include:

- over 20 trains operating recently at half power because of a shortage of spares;

The shortage of spares was due to the sudden damage caused by snow. A number of traction motor failures required motors to be cut out until the replacements arrived. Units can operate on half power without any risk to safety. All units have since been repaired and are now running at full power.

- *approximately one in six 317 trains without a fully operational PA (Public Announcement) system; and*

NXEA do not have any 317 units in service with PA defects. NXEA has a contingency plan for taking trains out of service with defective on train equipment. In the event of a defective PA on a 317 the unit will be allowed to complete its journey and then be removed from service. 317 units have recently been fitted with a passenger information system (PIS) that makes automatic passenger announcements and displays, a 317 unit is allowed to remain in service with a defective PIS, announcements will be made by the driver via the PA.

- *Train 317 653 with a missing handrail – and no repair book to report it in.*

Unit 653 has not been reported with a handrail missing. Unit 662 was reported to have a drivers' second man side handrail missing, this unit was like this since the unit was transferred to NXEA. Because of this unit 662 had a restriction placed on it, which was that the cab was not be used as an open end cab, whilst a new handrail was being manufactured. The handrail has since been manufactured and fitted.

Could the response please focus on the reporter's assertion that the maintenance regime needs to be reviewed to ensure standards improve?

The maintenance VMIs are always under review with reference to continued improving of standard performance. Faults and failures are constantly reviewed against the maintenance regime, to outline where job tasks can be added or the frequency amended.

Additional information provided by NXEA

The unit 653 has been checked since the complaint and does not have a missing handrail and also has a repair book in the unit cab. Datastream (the digital system used within NXEA for recording all maintenance tasks that have been undertaken and reports etc) does not show any record with regards to either of the above missing or being replaced. We cannot confirm the condition prior to the report but all evidence is pointing towards this being the incorrect unit number.

As part of every unit exam regime a check is conducted on the unit repair book to ensure that it is in the cab and that there are enough pages left in the book for driver defect reporting.

40423 Hidden recommendations being breached

The reporter has been made aware that the *Hidden recommendations* are being breached by some roster clerks working at Southern. The roster clerks are apparently rostering staff in excess of the recommended number of hours resulting in them not receiving the minimum period of rest between shifts.

Concern is also being expressed that the roster clerks seem to be forging the paperwork so that the breaches are not apparent when timesheets are being filled out. The reporter believes that the problem exists because of the high workload and this is due to increase when the route extends to Eastbourne.

The reporter would like Southern to remind all roster clerks that staff are to receive the recommended period of rest between shifts and are not expected to return to work before this.

The reporter would also like more drivers to be recruited as well as driving instructors. Please comment.

Additional comment - It is understood that on occasion the *Hidden recommendations* may be temporarily breached to ensure the smooth running of services. As long as this is the exception, and not the norm, is this viewed as acceptable practice?

Response from Southern

We have looked through the last six weeks rosters and have not found any instances of roster clerks overriding hidden to support the reporter's concerns. There is a facility in crewplan to check if *Hidden* has been broken.

At a local level our Production Managers do go through any instances of breaches of hidden and verify whether they are actual breaches or "paper" breaches such as returning for a non safety critical task where nine hours rest is allowed.

We would welcome any feedback from traincrew, if they can give instances when *Hidden* has been broken so that we can investigate the claim.

40420 Right Away indication given against a red signal

A spate of recent incidents has prompted a reporter to contact CIRAS with concerns that conductors are being given right away (RA) indications against red signals by members of platform staff at Three Bridges.

The reporter is concerned that the training these staff are receiving may not be placing enough emphasis on the importance of not starting against a red signal. This concern is heightened for new members of staff who may be less experienced.

Can more emphasis be placed on the risks of starting against a red signal in the training given to members of platform staff? The reporter feels that the supervisory period that platform staff undergo when they start should be increased to provide lengthier mentoring and monitoring opportunities.

Response from Southern

We thank the Reporter for the observations made with regard to platform staff at Three Bridges and we are concerned to learn that there has been a "spate" of attempted dispatch against red signals. Unfortunately, none of these have been previously reported to line management, operations inspectors or to our safety section and therefore have not been formally investigated, as would be the requirement under section 5.2 of our safety manual.

Clearly such instances represent safety of the line incidents and are always thoroughly investigated by our operations inspector team. Southern has a robust investigation process in place and each incident is investigated on its own merits. This would involve "medscreening" the staff implicated and then establishing immediate causes and then root causes, in order to recommend measures that will negate a repeat of the event. This is done in such a way that supports the member of staff and allows for chain of care if they have made a mistake.

It is true that newly qualified staff do represent a higher risk because of unfamiliarity or lack of confidence. The Southern training and competence management system focuses on the newer members of staff for the first year in their post and once the new recruit has been

inducted, they are sent on a 13 day intensive training course (15 if they need PTS). The training is delivered by our Operations Training centre trainers with day 13 dedicated to "SPAD" awareness. At the end of the course they have to pass an assessment.

The recruit then spends a minimum of 10 days with a mentor at their dispatch location prior to a member of the Operations Inspectorate assessing them practically and to re-check under-pinning knowledge. If the standard is met, they are licensed as competent, if not; they are given an action plan and are re-trained in the areas which are considered a weakness.

We are currently working on a formal training package for the mentorship arrangements. This will also assist in recruit development and from there the recruits are monitored locally on a regular basis by their supervisor and at least every three months by an operations inspector for the first year.

These measures go a long way to addressing the risks identified by the Reporter. We cannot reiterate the importance of immediately reporting such incidents to their line manager or through the All Southern Safety Hotline to enable a thorough investigation to be carried out, otherwise lessons cannot be learned.

40400 Safety communications between Southern and Network Rail

A reporter has raised a concern about a fallen tree that recently caused an obstruction for Southern trains about 200 yards down from signal OD68, between Crowborough and Buxted.

The main concern is about the communications between Network Rail and Southern, because there has still been no clarification as to whether the tree still poses danger to the bridge it is currently leaning against.

As the reporter points out, if a vehicle hits a bridge, the traffic is stopped and an engineer is called out immediately as an absolute priority. The bridge, too, should have been checked immediately the reporter believes. There is still a feeling of unease amongst staff that it perhaps hasn't been checked out. It may be that it has been checked out, but nothing has filtered through to staff at Southern at the present time. There is a fear that the bridge could have been weakened.

Could it be confirmed that the bridge poses no risk? What is the procedure if a large object (not a road vehicle) hits a bridge?

Response from Southern

We can report that the Network Rail vegetation contractor attended the site and made the tree safe soon after the incident, with no obvious damage to bridge reported at the time. Soon after the event the Network Rail structures staff inspected the bridge and confirmed that no damage had been caused.

The tree belongs to the local parish council as it is on a footpath. Despite request to them, no action was taken, so the Network Rail contractors were recently instructed to remove the tree from against the bridge and leave tidy. This should have now been completed.

Although this type of event is quite rare, it has now been agreed that in future NR Structures will be instructed to inspect structures hit by any large, heavy tree at the time of the incident and that this will be requested through Sussex Incident Control based in Croydon.

40309 Concern over the fatigue index

A reporter has contacted CIRAS concerned about the fatigue index that is used when designing diagrams for Southern train crew. The reporter believes that the current fatigue index is flawed in several ways as it doesn't take into consideration all aspects of a typical work day for train crew.

The reporter raises the following concerns which he or she believes are overlooked in the current index. Firstly the reporter states that engineering work frequently interferes with diagramming adding an hour or so to shifts regularly. Secondly, although there is a rest period of 12 hours between shifts, the reporter doesn't believe that the index takes into account travelling times to and from work. The reporter believes that for some staff travelling times may be considerable because of the remote locations of some depots. Also the reporter finds that shifts which start in the early morning and finish in the early afternoon need special consideration. He or she believes that staff working these shifts are particularly vulnerable to suffering fatigue especially if the shift is lengthened or if travelling times are long.

The reporter believes that the fatigue index is not specifically designed to cater for train crew and doesn't take everything into the equation as he or she believes that staff are suffering more and more from fatigue. A concern for the reporter is the risk of drivers having SPADs due to tiredness and poor concentration.

The reporter would like Southern to address the following questions:

- Where does the information come from to design the index?
- How is this information used to achieve the goals of the fatigue index?
- Is the index compiled by experts in the transportation industry? If not, who by?
- Does the index take into consideration travelling times to and from work?
- Is there any way of improving the scheduling of early morning turns?

Response from Southern

The current Winter Traincrew master rosters were produced using the HSE's new Fatigue & Risk Index calculator. Prior to commencing the new rosters, a representative from the HMRI gave a presentation to the Southern Management team who were to be responsible for creating the new rosters and driver/conductors company council representatives. A new feature of the latest Fatigue & Risk Index calculator is that it can show commuting time.

A subsequent meeting was held between the Southern Management team and drivers company council and following consultation the local representatives agreed on commuting times for all drivers depots on Southern, these times were included in the current Winter Traincrew diagrams.

At present Southern only use the Fatigue & Risk Index calculator to work out scores for the master roster; ATOS Origin who supply our rostering software are working on a solution to

include the Fatigue & Risk Index calculator in their Crews on Genius system which is being used by Production Managers to book traincrew on duty. Using our rostering package staff that regularly work rest days are monitored to see that they do not trigger a high fatigue score.

Early morning turns are produced in accordance with the current conditions of service.

The HSE's new Fatigue & Risk Index calculator was developed by Qinetiq & Professor Simon Folkard under contract to HSE. The Fatigue & Risk Index is based on published scientific literature on fatigue, alertness, sleepiness and occupational injuries. The background report is available on HSE's website.

Southern has also issued guidance on the management of fatigue, in its publication 'Driving Professionally'.

40370 Loud volume of AWS bell and warning horn on class 357s

A reporter has contacted CIRAS to express concern that the AWS bell and warning horn in the driver cab of the class 357s are too loud, potentially leading to long term hearing damage for drivers.

The AWS speaker on the class 357s is positioned on the left hand side of the drivers cab and is only a short distance from the drivers left ear. The reporter believes that if the AWS speaker was positioned further away on the other side of the cab, that this may go some way to easing the volume of the sound emitted.

For RSSB

Can RSSB clarify whether the AWS bell and warning horns in the class 357s are within the group standard and whether they are the correct type of AWS bell and warning horn for that particular class of train? The reporter feels that because the volume is so loud that perhaps the wrong type of AWS bell and warning horn has been fitted in to the class 357s.

For c2c

The reporter feels that the volume needs to be reduced even if it is within the group standard. One way in which this can be achieved is to move the AWS speaker to the other side of the drivers cab. This would mean that the speaker is further away from the driver's ear when the AWS bell/warning horn sounds.

Additional information

The reporter is aware that several drivers are covering the speakers on the class 357s to reduce the volume of the AWS sound in the cab.

Response from c2c

We will be fitting a foam muffle to the speaker to reduce the volume as per successful trials on similar fleets. We are currently waiting for the material to be delivered. Once the delivery has been received the modification will be completed.

40612 Notice case at Southend Central not kept up to date

The notice case at the c2c remote signing on point at Southend Central is not kept up to date according to one reporter. This has been an ongoing problem for more than a year.

The reporter states that the weather reports that are supposed to be updated daily are often more than two weeks out of date, and that some of the emergency speed restriction (ESR) signs are left up long after the ESRs have been removed from the track. The concern for the reporter is that staff are viewing out of date or inaccurate information when signing on.

Staff have to sign to say that they have viewed the notices when they sign on every day. The reporter does not feel that staff can do this when the notices are not kept up to date. If staff were viewing the wrong information when signing on at Southend Central, this could lead to incorrect judgements being made about the level of adhesion on that day.

- Who is responsible for keeping the notices at Southend Central up to date on a daily basis?
- Could c2c look at the possibility of allowing the staff who sign on remotely at Southend Central, to sign on at Shoeburyness instead?
- If this is not possible, would c2c put in place a robust procedure to make sure that the notices at Southend Central are kept up to date on a daily basis in the future? The reporter is concerned that if a procedure is put in place that it will only be carried out for the first few weeks before the routine falls by the wayside.

Please comment.

Response from c2c

The notice cases at Southend Central are subject to six monthly checks by the Operations Standards Team. There was also an additional check carried out after the report was received and the notice cases were updated. A process has now been put into place where all the notice cases at remote points are checked on a weekly basis.

40693 Conductors not receiving 12 weekly safety briefings

Conductors working for London Midland not receiving the safety briefings every 12 weeks when they are rostered to is a concern for one reporter. This is said to be an issue at many different depots.

According to the reporter, conductors should be rostered to receive a safety briefing every 12 weeks which provides information on the current drugs and alcohol policy, seasonal effects on the working environment and general information on safe operating. However, the safety briefings are continuously being cancelled because of a need for the conductors to work trains on these days, which the reporter feels is unacceptable. Many of the conductors at London Midland have not received a safety briefing for over nine months, which the reporter feels could result in a safety related incident.

Can London Midland ensure that all conductors receive safety briefings every twelve weeks when they are rostered to?

Response from London Midland

London Midland are committed to ensuring all colleagues are regularly briefed on all safety and mandatory health and safety matters, currently we are reviewing how we communicate Occupational Safety and Operational Safety/Standards items to all traincrew to come into line with the current industry best practice. Unfortunately due to a variety of reasons we have been unable to consult these changes in for conductors, thus the current process of Safety Training and Update Days (STUD) will remain, with the next brief commencing in May.

To improve the performance and attendance at certain depots, we are currently redesigning the method of resourcing the STUD release and removing STUD from the links, however this does not change the requirements for attendance and at these locations conductors will be released on the daily rostering system.

40662 Incorrect fire extinguishers on the new voyagers and HSTs

Incorrect fire extinguishers provided in the kitchen areas on the newly refurbished Voyagers and high speed trains (HSTs) are a concern for one reporter.

Since the refurbishments have taken place the reporter is aware that the only fire extinguishers available in the new kitchen areas are 2L AFFF water-based fire extinguishers. The kitchen areas on the refurbished Voyagers and HSTs house a variety of electrical appliances and the reporter feels that the water based fire extinguishers would be inadequate to fight an electrical fire if one occurred.

According to the reporter, first aid fire fighting training states that water based fire extinguishers are not suitable to use on electrical fires because of the risk of electrocution. The correct fire extinguisher to use in an electrical fire is a carbon dioxide fire extinguisher.

The reporter would like to see that appropriate fire extinguishers, such as carbon dioxide ones replace the AFFFs fire extinguishers in all the new kitchen areas of the Voyagers and HSTs undergoing refurbishment.

Response from CrossCountry Trains

CrossCountry has recently reintroduced HSTs following a significant and substantial refurbishment programme. This was completed in record time by competent and committed sub-contractors who have sought to deliver high quality trains, safe for both customers and staff. The fire extinguishers that were fitted straight out of works are appropriate for the fire risk present in their respective locations. Where AFFF fire extinguishers have been fitted they contain a dielectric component that makes the water based foam extinguisher safe for use on fires where electricity is present at up to 25,000 Volts, these extinguisher units carry all of the appropriate markings as required by *BS EN3* – we advise, train, instruct and inform traincrew that the local electrical isolation switch should be used to turn off the electrical supply in the event of an electrical fire and notices are posted to this effect. We are additionally fitting CO2 extinguishers to the HST catering homebases in advance of the voltage regulation equipment being fitted in this area in recognition of the enhanced (but still small) risk of fire.

The Voyager refurbishment programme is currently underway and we continue to fit the same extinguishers as previously installed, the fire risk has not changed materially and the risk assessments and maintenance arrangements in both cases remain appropriate.

40715 The use of train horn being gradually 'degraded'

One reporter would like to voice concerns over the gradual 'degrading' of the use of train horns. This started with drivers being instructed to not use the horn when entering or exiting a tunnel and then not to use the horn between 23:00 and 07:00. Further, the instructions to use a single tone instead of the two tone horn when passing a whistle board adds to the reporter's concerns.

The horn is the only means a train driver has to warn the public that a train is approaching, and with modern trains being increasingly quiet, such as the new class 377, the reporter is concerned that less use of the horn greatly increases the chances of someone getting struck by a train. Many people today use MP3 players or talk on the phone on the go and pay less attention to their surroundings. The reporter argues that a single tone is not distinct enough to warn the public that a train is approaching, as there are many single-tone noises in day-to-day life, and it is therefore easier to ignore. The reporter is also concerned for p/way staff, in particular when they work around the exit of a tunnel and do not have a view of approaching trains.

There are also concerns among drivers that the rules contain a lot of grey areas. Drivers are asked to use discretion as to when they use the two-tone horn, but are at the same time discouraged from using it by management. The reporter would ideally like to see the use of the two-tone horn reinstated and feels that drivers should have the freedom and the responsibility to use the horn as they deem necessary, as they are ultimately responsible if someone is struck by their train.

The reporter recognises that the changes have been brought in to appease neighbours to the railway, but believes that the dangers of not using the horn sufficiently outweigh the nuisance.

Please comment.

Response from Southern

Southern thanks the Reporter for raising these concerns.

The changes regarding the use of the horn were introduced following a UK wide study and consultation with stakeholders and it is recommended the reporter visits the Railway Safety and Standards Board web site at: www.rssb.co.uk then in the search box, type in 'train horns' for a full background to the changes and the work that sits behind them.

The Reporter's first concern relating to the hours the horn can be used and the tones that are applicable is clearly set out on the RSSB web page but should any further assistance be required we are happy to discuss this with the reporter.

For the second concern raised by the reporter it is important to read the work that went in to the rule changes as indicated in the first response. That aside the train horns fitted to our modern stock are significantly louder than those previously fitted to older stock and this does provide for a greater warning. In addition to this, *Rule Book module TW1 issue 8, Section 10.2* provides clear guidance on using the horn as a warning for anyone on or near the line. It is also important to note that Network Rail operates a safe system of work when working trackside.

It cannot be accepted that there are any grey areas as the reporter indicates in the third concern as the *Rule Book* is very clear on the requirements and occasions for use. Equally these clear requirements are applicable to the assessor and any allegation that this is not the case must be raised so that a suitable investigation can be undertaken.

As for changing the *Rule Book* requirements this may also be suitably dealt with if the reporter visits the RSSB website.

Since the changes have been made there has not been any increase in safety related incidents within Southern that have been a result of the changes to the horn regulations.

Response from RSSB

Around the turn of the century, the rail industry experienced a considerable increase in the number of complaints about the noise from train horns. This was a result of two changes that the rail industry had initiated – a program to install many more 'Whistle Board's and the introduction of new trains which had more piercing horns. The complaints were from residents living near the line, Members of Parliament, Local Authorities or the Noise Abatement Society. A national campaign was launched by the Noise Abatement Society and Ministers called industry in to explain what was going on.

As a result, a cross industry steering group was set up and it commissioned a significant amount of work to understand the nature of the problem and to identify the most appropriate way of addressing the concerns of neighbours while maintaining the safety of the railway. This work looked at mapping the locations at which there were complaints, undertaking local surveys to both map the noise levels and also to understand exactly the impact that train horns were having on neighbours. The local research found cases of neighbours who had very severe reactions to the sounding of horns – it would not be an exaggeration to say that in a limited number of cases, we found that horns were ruining people's lives. At the same time, it was clear that the people who were severely affected were saying that 'everything was OK until a few years ago' – i.e. that what had changed was within the railway rather than them being new residents of houses that had always suffered that level of noise.

This work led to two very significant conclusions – First, that the noise that horns were making was causing harm to neighbours, and the safety responsibilities of the railway sector include the responsibility not to cause damage to all persons affected by the operation (*Health and Safety at Work etc. Act 1974*) it was not 'safety verses environment', but 'safety verses safety.' Second, it was recognized that the rail industry had itself brought about the problem and therefore had to do something to fix it and could not hide behind the defense that it was an essential safety control and the railway had always been there relative to the houses.

Other research looked in detail at the safety benefit that the use of horns delivers at level crossings. Although it found there to be a benefit, it also found that the benefit is much less certain than we had previously believed. For example the behaviour of some footpath crossing users is such that horns offer them no protection – those wearing headphones and those who get suddenly distracted while crossing (such as those with dogs).

Accordingly a model was developed to enable the steering group to consider the right balance between the rather uncertain benefit of sounding the horn at all whistle boards at all times and the much more certain safety disbenefit of blasting noise into residential homes regularly and at all times of the day.

This model showed very clearly that the safety balance between the protection of people at the trackside and those in homes was significantly skewed and should be changed.

The steering group made a number of recommendations, most of which have now been adopted by the industry – these were published by RSSB in December 2006 and the changes in the *Rule Book* were introduced in 2007.

Rule Book Module TW1 published in June 2007 includes the instructions on when to sound high or low tones, or both and the audibility requirements where published in Group Standard *GM/RT2484*.

The requirements for sounding the horn when entering or within tunnels dates from the time when staff could well have been working there whilst lines were open to traffic. This is no longer the case and tunnels must be closed to traffic, electronic warning systems be in place or a speed restriction imposed before any kind of work can be undertaken within them. Similarly, the Controller of Site Safety (COSS), if working near the exit to a tunnel, must take this into account when calculating warning distances if working when the line is open to traffic.

The Cross Industry Steering Group recommended that horns should not routinely be sounded between 23:00 and 07:00 and also recommended that where the technology is available, the low tone only should be used at whistle boards for routine soundings. This did not change the instruction in the *Rule Book* that whenever someone is seen on or about the track the full two tone horn should be used. At unprotected level crossings such as footpaths, the general public is expected to be responsible for their own safety when crossing the line by 'stopping looking and listening'; anyone listening to music on headphones is not fully complying with these requirements.

Finally, a driver may always sound the two tone notes to give warning to anyone on or near a running line on which they are travelling. This can equally apply to trackworkers or to members of the public attempting to use a level crossing.

It is not our understanding that drivers are held responsible for striking people on the track. Provided that they have complied with the rules there is no suggestion that they should be blamed in any way. In fact the industry is more concerned for the welfare of the driver many of whom will have suffered some trauma as a result of the event.

A more detailed summary of the output from the train horns steering group is available on the RSSB web site under Community Relations.

40587 & 40597 IVRS black spots between Tapton and Wingfield

Two reporters have come to CIRAS independently about the same issue relating to the IVRS (Interim Voice Radio System) and poor reception on a stretch of track about a mile and a half long between Tapton and Wingfield. This section of track has recently had a new safety system installed and axle counters have now replaced the track circuit system there. IVRS handsets, used for emergency communications between all train drivers in an area and the signaller, have consequently been issued to CrossCountry drivers as a replacement to track circuit operating clips for use in emergency situations.

The reporters say GSM-R reception here is inconsistent and there are recognised black spots. This has been acknowledged by Network Rail in the weekly operating notices (WON). As a result of this, ASLEF have advised a maximum of 40 mph speed restriction, which has now been agreed and is in place.

There are several safety concerns that the reporters would like to see addressed.

For Network Rail:

Both reporters are concerned about the poor radio reception. In an area with reception black spots, if there were a derailment of some sort there would be no way of communicating the situation to other drivers. Track operating clips do not work on this section because there is no track circuit here.

- Is anything being done to address the issue of black spots?
- Is there likely to be any resolution of this issue sometime soon?

For CrossCountry:

The reporters would like some reassurance that safety will remain the first priority, and that drivers can continue to travel at safe speeds over this section of track until the IVRS issue is resolved.

In addition, train managers have not been trained on the use of IVRS and have been told to continue normal emergency protection, which means track circuit clips and detonators. In the event of an emergency on this section, track circuit clips would not work (again because there is no track circuit) to put the signal back to danger. And train managers do not know how to use the IVRS handsets in the event that the train driver was incapacitated.

Please comment on this apparent loophole. Will IVRS training be given to train managers?

Response from CrossCountry

Safety is paramount and in this case it became apparent during tests that there was an area where the IVRS reception was not guaranteed. Temporary arrangements were implemented in the 'black spot' by the provision of additional lineside telephones. However, a new base station has since been installed and the area in question now has full IVRS reception.

The issue of training drivers in the use of IVRS was agreed during the early implementation of IVRS and axle counter schemes as part of the West Coast Route Modernisation program. The risk assessment and safety cases for axle counter schemes with IVRS endorsed this arrangement and all subsequent resignalling schemes utilising axle counters in track circuit block areas have followed this process.

The training material provided by Network Rail has been subject to review since the initial axle counter signalling schemes were introduced and CrossCountry has been involved in its advancement to provide quality information to train drivers.

The introduction of GSM-R radio communications system that is currently being installed across the network will, in the near future, make old radio systems such as NRN, CSR and IVRS obsolete. GSM-R will be superior to all of the old systems and will be used on all routes, irrelevant of the type of train detection in use.

Response from Network Rail

The East Midlands Re-signalling Project has been developing a solution to resolve the black spot issue. The technical fix was implemented on the 28 November 2008 at 11:20 and the IVRS system now has full coverage within the Tapton and Wingfield area. The Temporary Speed Restriction has now been removed.

40673 DOO monitors and mirrors 'poorly placed' in Sussex

A reporter is concerned about the position of several driver only operated (DOO) monitors and mirrors.

DOO monitors:

Monitors at Brockley station and Forrest Hill station, both on platform two at the eight-car mark, are placed too high up according to the reporter. This means that the drivers have to stoop down and crane their necks to see the screens, which can lead to neck pain. This is also a problem at South Bermondsey station, also on platform two at both the four- and eight-car mark. At this station the platform curves and the driver cannot see the end of the train without the monitors. The problem is worst when driving 319 or 456 stock, as these trains have relatively small windows.

The reporter is concerned that drivers might be inclined to not use the monitors at these stations and look down the train instead. At South Bermondsey in particular there is a risk of trapping a passenger in the doors of the rear carriages, as these cannot be seen from the cab.

The reporter would like to see these monitors lowered to cab-level.

DOO mirrors:

Mirrors at Honor Park station and Sydenham station are placed at the eight-car mark so that if a driver stops in the right spot to be able to see the full length of the train in the mirrors, the train is situated right under the signal. The driver cannot see the signal from inside the cab in this situation, and if the signal suddenly changes the driver has no way of knowing this. If the driver stops where he or she can see the signal, there is a risk that part of the train is hanging over the platform. The eight-car mark at Anerley station is also directly under the signal, though there is no mirror here. The signals at these three stations are placed at overhead bridges and so may be hard to re-position.

The reporter suggests the issue could be solved by lengthening the platforms towards the London end, but acknowledges that this is an impractical solution. Alternatively, the mirrors could be replaced with monitors.

The reporter states that the monitors were installed by Network Rail but also approved by Southern, so he or she feels that both companies are responsible for resolving the issues.

Response from Network Rail

We thank the reporter for raising what he/she believes to be an unsafe situation when using this equipment under driver only operation (DOO) conditions; we welcome reports such as this. Southern, the Train Operator, and Network Rail have considered this report in some detail and made visits to the locations highlighted.

The DOO monitors and mirrors have been in place on these stations for over 20 years and have an extremely good safety record. Any movement from their current position would need to be very carefully considered and validated. For example moving them lower may make them slightly easier to see, but this creates a hazard for passengers striking their heads on the equipment, and makes them an easier target for vandalism and graffiti.

Clearly we would expect train drivers to use the equipment responsibly, and do not accept they would take short-cuts with passenger safety by looking out of the window and down the train, when observing mirrors/monitors is far more convenient.

The relationship between the DOO equipment and the station starting signal is a critical one, and at some location 'check signal aspect' signs have been provided where a risk of starting against the signal exists. It should be remembered that the 'Drivers Reminder Appliance' must be used if stopping with the starting signal at red. Additionally, under normal circumstance should the signaller need to revert a signal to danger, he will make contact with the driver first as required by the Rules.

Again, we thank the reporter for bringing their concerns to our attention, which will be reviewed during subsequent site visits. However, for the above reasons, the outcome of the review may well be not to change the current set-up at each of these stations.

Response from Southern

We concur with Network Rail's response. We have and are reviewing all locations with DOO monitors to ensure that there are no anomalies.

40731 Inadequate rest between shifts along the Windsor-Reading line

Lack of rest between shifts for station staff working along the Windsor-Reading line is a concern for one reporter. The station staff have been reported to be working late night shifts and then returning for early morning shifts the next day, without receiving adequate rest breaks between shifts.

The reporter believes that this could be verified through time and shift sheets. The reporter fears that this may generate high levels of fatigue and consequently affect their job performance.

Could South West Trains:

- remind staff that they should have a minimum of 11 hours rest between shifts as stated by the *Working Time Directive 2003*; and
- review time or shift sheets to ensure that staff are receiving this period of rest?

Response from South West Trains

South West Trains would like to thank the reporter for raising the issue of shift patterns and rest periods for station staff. The requirements for South West Trains employees are detailed within company policies and procedures and staff rosters are subject to fatigue index checks to ensure that they comply with industry and legislative requirements.

Management staff are reminded to ensure that staff rosters comply with these requirements and any rosters produced are monitored for compliance with working hours and rest criteria and any exceedences are required to be investigated, with suitable remedial action taken to prevent potential recurrences, in addition to any formal action that may be necessary, dependant upon the circumstances.

This process has identified instances where staff have been incorrectly rostered and/or had insufficient rest, where this has occurred the local systems have been reviewed for adequacy and amended as necessary. The working hours requirements are briefed to staff during initial training and are included in the information provided to staff as part of their briefing procedures, this information will be included in the next briefing for these staff groups.

40717 Restricted emergency access into Bolton station from car park

Restricted emergency access into Bolton station from the car park located behind platform five has been highlighted by one reporter. It has been noted on a daily basis that passengers are parking their cars at random in the car park because there are no designated parking bays. This is resulting in cars being parked across several bays blocking access for other vehicles.

The reporter is concerned that if cars are blocking the access from the car park to platform five of the station it will prevent the emergency services from getting through in the event of an emergency. This route is the quickest and easiest access to the platforms at the station.

The reporter would like Northern to allocate and mark out parking bays appropriately so that cars can park in designated spaces.

Response from Northern Rail

Northern are already aware of the issues with parking at Bolton station and have already been in discussion with Greater Manchester Fire Service about concerns with emergency access and have been working up an enforcement strategy for the station. The root cause of the issue is a lack of adequate parking capacity at the station, but this does not excuse illegal parking.

The first part of our strategy has entailed lining out the car park, with markings being painted on the walls where it is not possible to mark out the floor, and 'no parking' areas have been clearly indicated

In addition to this a car park enforcement exercise took place on 30th April from 05.00am. All passengers were stopped in a 'road block' situation, handed specially prepared leaflets about parking restrictions, and advised of where to and where not to park. This approach is a standard safe system of work based upon highways agency principles, and is the first step to educating customers on parking restrictions.

The car park was full except disabled bays by 07:20 and was closed off . Access was permitted for permit holders and deliveries and drop off and pick ups.

This process was replicated on Friday 1 May and Tuesday 5 May and will continue on Wednesday 6 May. On Thursday 7 May and Friday 8 May this action will change to monitoring, and warning notices will be issued to customers who park incorrectly. This two stage action will hopefully educate the majority of customers on the correct way to park.

From Monday 11 May full penalty parking enforcement will commence for any vehicle parked contrary to the bylaws.

We have received a couple of adverse comments about this approach, but this has been outweighed by a number of customers who have welcomed our approach, having had previous experience of being blocked in, and we now hope that the combination of signage, education and enforcement will eliminate the parking problems at Bolton.

In the longer term, we continue to explore options with Network Rail and other stakeholders to expand the car parking capacity at Bolton.

40697 Match day arrangements and crowding at Cardiff Central

Match day arrangements made by ATW at Cardiff Central greatly concern one reporter. These days occur during international and Six Nations games. The reporter says that people who populate the platforms are often drunk. The platforms are crowded and up to five people deep, with passengers standing right at the edge. There is a real risk that someone will fall in front of a train - many are not even able to stand up properly. Others can actually be seen fighting on the platforms, and some passengers are abusive.

Despite a crowd management plan, and the intervention of police and safety stewards, the reporter believes that this difficult situation is not being managed effectively enough. There is a barrier system to let people onto the platform prior to the arrival of the trains, but this is viewed as insufficient. Passengers are released onto the platform in groups after queuing up outside the station, but this doesn't seem to have the desired effect of substantially reducing crowding

Further measures are needed to contain the station situation on match days, the reporter argues. Have any additional ones been considered? The reporter suggests that it might be better to only release passengers onto the platform when the trains have actually arrived, but thinks this is unlikely to be implemented.

Please comment.

Response from Arriva Trains Wales

ATW would like to thank the reporter for raising their concern. It is always welcomed and encouraged that staff play an active role in the management of safety. In answer to the reporter's concerns;

Cardiff Central is like no other station in the UK, because of its location next to a major stadium and dealing with such a diversity of destinations after events.

Planning for special events at Cardiff (including Six Nations rugby matches) begins about a year in advance. The planning process is developed in conjunction with the Millennium Stadium management team, local authorities, South Wales and British Transport Police, First Great Western, CrossCountry Trains and Network Rail.

This process has been in place since the stadium opened and has evolved from its infancy at the 1999 Rugby World Cup, to the system that is used today. Prior to 1999 a special event crowd management plan was not used.

Each event plan is developed by the Special Events Manager, who works closely with the all parties mentioned above and also with ATW's train planning & fleet departments to ensure that 100% of the fleet is available to meet capacity needs on the day.

Prior to every event a briefing is held with all parties so that the plan can be altered or amended if necessary.

On an event day, Cardiff is staffed, depending on the type of event, by up to 20 ATW Managers, 40 BTP officers, 80 stewards, 4 car park attendants and 20+ revenue staff.

The staff and passengers are controlled via a Crowd Management Centre (CMC) at the station during these events. The sole purpose of the CMC is to control crowds returning after events and ensure that these passengers are safely loaded on to services.

As well as being staffed with ATW personnel, the CMC also has direct contact with St John's Ambulance Volunteers on site and a BTP inspector who is in turn directing BTP officers at the station.

Before being able to access the station platforms, passengers are queued in up to 14 different lines to segregate them. Queuing system destinations are broken down for simplicity e.g. Midlands, Crewe/North Wales, West Wales etc.

Passengers are released onto the platform on the authority of the CMC managers. Only the number totalling the capacity of the train are released up onto the platform and they are closely monitored by CCTV. Passengers are only released on to the platforms after the departure of one train and before the arrival of the next. This is to ensure that passengers are able to board when a train arrives. To load a platform after the arrival of a train would cause passengers to rush from the queues onto the platforms and cause a greater risk of injury or tripping/falling than allowing them on to the platform before the train arrives.

To ensure passenger safety a team of ATW stewards work each platform to safely load and direct passengers to their services and to keep passengers behind the yellow lines on each platform.

ATW points the reporter to the fact that have been no accidents (with the event or crowd management as a causal factor) during our time as station operator for Cardiff Central, and no serious or reportable accidents at all since special event planning was started in 1999. ATW would like to express that we share the reporters concerns with passengers under the influence of alcohol.

Every reasonable effort is made to ensure that passengers are capable of travelling safely and ATW works closely with the BTP to ensure that anyone not fit to travel is removed from the station.

Finally, we will openly invite any employee to discuss any issues involving the events with their line manager or the Special Event Manager at any time, and if they would like to observe how the event is undertaken this can also be arranged.

40705 Slippery mats at the top of the stairs at Bolton station

Slippery matting located at the top of the stairs leading to platform three and four at Bolton station is a concern for one reporter. When it rains, the rubber mats become wet and consequently, passengers and staff walking from the overbridge to platforms three and four are at real risk of slipping and injuring themselves.

While these mats are in place to assist blind people, the reporter feels that they are not fit for purpose as blind people too are at risk from slipping. To emphasise the gravity of the situation the reporter has highlighted several instances where passengers have slipped on the matting. The reporter is aware that one of these instances resulted in a passenger breaking an ankle and having to go to hospital for treatment.

The reporter would like Northern to replace the rubber mats and use a material which is both non-slip and can assist blind passengers.

Response from Northern Rail

Northern is aware of on going problems with the floor surface on the footbridge at Bolton and is working closely with our stakeholders Network Rail and Greater Manchester PTE to resolve the problems.

There have been difficulties with the footbridge floor surface since it was re-laid some years ago, funded by GMPTE. Due to problems with the installation of the covering it kept lifting and bubbling creating a tripping hazard. After substantial delays due to the original contractor going into liquidation and discussions between the parties about who would rectify the defects, and how this could be done, agreement was reached last year to totally replace the floor covering on the footbridge and stairways, and Network Rail carried out this work on behalf of GMPTE a few months ago.

The mats referred to are actually inlaid tactile strips to identify the approaching staircase for visually impaired people. We are aware of a number of instances of customer slipping in wet weather, although in some of those cases the customers have admitted to running down the stairs, so the tactile strips are not the only contributing factor to the accidents which have occurred.

However Northern accept that in their current form the tactile strips create a hazard, and we have not yet 'accepted' the new floor surface from Network Rail, and this issue is being tackled through the handover process with Network Rail and GMPTE.

We do not as yet know the solution to this problem, but both parties have acknowledged the issue we have identified and a handover meeting is planned for next month to try and resolve the issue.

In the meantime Northern are attempting to keep the floor surface clean and as dry as possible (the footbridge is covered, which helps) and will use signage and announcements to remind customers of the hazards associated with running on stairs.

40664 Self dispatch at Liverpool Lime Street and Manchester Airport

A concern has been raised regarding a new self-dispatch procedure due to be implemented at Liverpool Lime Street and Manchester Airport stations at the beginning of April 2009.

Under conditions of the new self dispatch, the conductors are expected to dispatch their trains on their own without the help of platform dispatch staff. The reporter states that some of the platforms at Liverpool Lime Street station are on a curve and the signal sighting is poor. He or she feels this could present a safety risk if a conductor was to misread the signal and potentially send a train through a red signal. According to the reporter, FTPE feel that the white light on the dispatch button is adequate to indicate that the signal is clear but the reporter disagrees.

At Manchester Airport in particular, the reporter states that with top train working there is an added risk that the conductors could become confused as to which train the OFF indicator is for.

Both stations have high volumes of people on the platforms. The reporter suggests that First TransPennine Express refrain from implementing self-dispatch at these stations and continue to provide a member of dispatch staff on the platform.

Please comment.

Response from First TransPennine Express

First TransPennine Express (FTPE) would like to thank the reporter for highlighting their concerns regarding self dispatch at Liverpool Lime Street and Manchester Airport Railway Stations. Whenever a new system of work is to be considered, we are required under the Railways and Other Guided Transport Systems Regulations to carry out a full Safety Validation. FTPE were accompanied by the HMRI on a visit to Liverpool Lime Street and a full risk assessment was carried out, the proposed self dispatch method was fully approved however a new agreement was reached with Northern and the company took the decision to continue with Northern's assistance. We emphasise that this was not for reasons of safety.

At Manchester Airport, again a Safety Validation has been completed for the proposed self dispatch method of working and a review meeting has been held. The risks at this location have been assessed jointly by FTPE and Northern Rail and any new method of work will take into account the layout of the station and the sighting of signals and equipment to ensure any risk is as low as is reasonably practicable. A further review meeting is planned for the beginning of August and until this time the current arrangements for dispatch will remain.

First TransPennine Express would like to assure the reporter that any concerns he/she may have concerning safety can be discussed with their line manager or a member of the safety team.

40702 Ticket barrier operation at Waterloo station

The operation of ticket barriers at Waterloo station on Saturdays and match days are of concern to a reporter. The ticket barriers in question – those near platforms 15-18 at the Windsor side of Waterloo station – are not being fully utilised leading to passengers being directed in a flow that could be deemed as hazardous.

The reporter is concerned that the situation could lead to unnecessary overcrowding which could be dangerous for commuters and station staff especially on days when a large number of people are travelling to matches taking place at Twickenham.

On match days in particular, there is a risk of passengers being pushed onto or falling onto empty tracks or being pushed onto barriers unnecessarily.

Part of the problem appears to be an operational instruction on match days which states that no barriers should be turned around without seeking management approval. The reporter doesn't think this is appropriate as it is not possible to always seek this approval when there are hundreds of passengers coming down the platform.

The reporter believes this instruction takes away responsibility from the staff who can see immediately what is going on and can have a better idea of what's coming down the platform than those manning the CCTV cameras in the control room. The reporter's suggestion is for the ticket barriers to be changed from entrance to exit or vice versa when the occasion arises.

Could more responsibility of operating the barriers and making short-term changes be given to the barrier operators to provide a smoother passenger flow during busy periods? The reporter would like to know whether the final responsibility of operating the barriers lies with the barrier operators or control room staff.

Also, could the operational flowchart be reviewed and plans put in place to address the passenger flow concerns raised by this reporter?

Please comment.

Response from South West Trains

South West Trains would like to thank the reporter for raising the operation of the Automatic Ticket Gates at Waterloo on platforms 15 to 18 in particular and during times of disruption/special event management. South West Trains would like to reassure the reporter that the issues raised have been reviewed and actioned by the relevant departments.

A comprehensive action plan exists for the operation of the Automatic Ticket Gates at Waterloo station. The processes were developed through a series of Hazard and Operability Studies, Risk Assessments and passenger modelling and were signed off by all the relevant stakeholders prior to operational implementation. Since full operation commenced on 5 January 2009 two formal reviews at one month and three months have taken place with another one due at six months. In addition a separate crowd management plan exists for special events to ensure the operation is safe during times when there is a large concentration of passengers using the automatic ticket gates to access and egress the platforms.

Monitoring of crowd movements takes place from a central control room, which has comprehensive CCTV coverage of the gates with the ability to open gated sections both individually and collectively if the crowds encroach on a predetermined point on the platform. Operatives will also take into account if the passenger concentration is either static or dynamic and follow the crowd management principles laid down in the operational plan.

No operational instruction exists on match days which states that “no barriers should be “turned around without seeking management approval” however changing the configuration of barriers does need to be justified either before or after the event dependant on circumstances with the control room to ensure that there is no “knock on effect” across the operation. This can be carried out extremely quickly via the radio system. The instruction to staff will be rebriefed to remove any doubt that may exist regarding this instruction.

The responsibility for operating the barriers lies with the barrier operators as defined in the operational plan and reiterated in their training. A gate operator may change the directional flow of a gate if necessary without seeking management approval first. However the overview of congestion across the whole gateline sits with the control room staff, both sets of staff act in conjunction with each other not in isolation to ensure that the correct decisions are made. If an incident occurred where crushing against the barriers was likely the gate operative or the control room could open the gates using emergency open button situated within each gated section or in the control room respectively.

As requested, the local management team will review the operational flowchart to ascertain if any improvements can be made.

40633 Timing of PNBs in metro drivers shifts

Metro drivers based out of Selhurst, Norwood Junction, London Bridge and Victoria are frequently not getting personal needs breaks (PNBs) until four or five hours into their shift, due to short turn around times and late running services is a concern for one reporter.

The reporter states that metro drivers have a demanding workload that often involves making 100 – 190 stops a day. Concern has been expressed by the reporter that if drivers spend four to five hours in the driving seat with no chance of a break, it could lead to them becoming mentally fatigued which could affect their concentration. This could result in drivers not responding in an appropriate manner.

According to the reporter, staff have already raised the issue of fatigue because drivers can be two to three hours into their shift when their bodies are telling them that they need a break. Could Southern:

- please detail how the diagrams are constructed (Are they determined by using a computer programme or are they designed by a member of staff?);
- review the diagrams to allow the timings of the PNBs to be situated at a reasonable time into the shifts and
- provide reassurance that they will look at this as an issue that affects the diagrams of all drivers in the Metro area and not as a problem for certain individual diagrams?

Response from Southern

We thank the reporter for bringing this concern to our attention and following investigation it is not accepted that Metro drivers are working four to five hours in the driving seat without a break.

From the December 2008 timetable the whole of the Metro Timetable was revamped to allow for longer turn rounds and pathway timings were increased to allow for robust workings.

The increased turn round times in certain areas and the recast diagrams have allowed time for drivers to take physical needs breaks before their actual official PNB.

The LDC have the opportunity at the scrutiny meetings twice a year before the May and December Timetable change to request diagrams to be adjusted if they feel the workings are too intense before unofficial or official PNB's.

Recently the DFC have run through all the permanent diagrams for December 2008 to check whether or not a driver has sufficient time for a toilet break before the actual PNB. We have also initiated a project to ensure working toilets are available at certain locations.

Diagrams are constructed in the first instance by trying to keep the driver on the same stock as long as possible for robustness and easier service recovery. The diagrammer will also take into account route knowledge, sufficient breaks within the stock working to allow for unofficial PNB's before the actual PNB. In most cases the official PNB will be placed between three to five hours betterment to the D.R.I. agreement between 1 hour 30 minutes and 7 hours (depending on length of duty).

The Southern Train Planning Office have used a computer system called 'Tracsis' which has produced Saturday permanent diagrams and then manually adjusted to suit LDC requirements.

The majority of the permanent diagrams produced do take into consideration drivers working intensely in the metro area and diagrams will be investigated if we receive any concerns.

40666 Ban on varifocals whilst working

A policy stating that conductors are not allowed to wear varifocals whilst working, even though some staff find them more suitable than bifocals is a concern for one reporter.

The reporter is under the belief that Southeastern adhere to a policy which apparently states that staff are not allowed to wear varifocals whilst working. This is resulting in some staff who wear glasses having to wear bifocals although they find them problematic, because the line across the lens causes a blind spot. This blind spot is resulting in staff having to peer over the top of the glasses which makes them pointless in the first place. This also results in them having to tread carefully when walking down stairs at a station or boarding and alighting, especially in an emergency situation when they would have to react quickly.

According to the reporter, wearing bifocals or varifocals is dependent on individual needs and therefore conductors should be allowed to choose what they feel safest wearing and what suits their needs best.

For Southeastern:

- Could Southeastern clarify which policy they are adhering to?
- Could Southeastern clarify why conductors are not allowed to wear varifocals instead of bifocals whilst working?
- Could the policy be updated to allow for the concerns above to be addressed?

Response from Southeastern

Southeastern would like to thank the reporter for drawing this matter to our attention.

Southeastern medical standards matrix is based on the latest *Railway Group ACOP, GO/RC3561 'Recommendations for Train Movements – Staff Suitability and Fitness Requirement' (issue 1)* dated October 2008. Whilst the ACOP does not prohibit the wearing

of varifocal lenses, it draws attention to the potential risk of misperception of red signals when wearing these types of lenses. In view of this risk, Southeastern opted to bar the use of varifocals for drivers and those who may be required to accompany a driver as a 'competent person', this would include the conductor.

In light of the reporter's comments Southeastern has reviewed its risk assessment in relation to the wearing of varifocal lenses by conductors and other 'competent persons' and concluded that the wearing of varifocal glasses can be permitted.

Southeastern will update the medical standard matrix to reflect this change.

40674 Defective warning horns in snowy weather

Further to a previous report (number 40078), additional concern has been raised regarding warning horns on class 158 and 170 trains in Scotland becoming defective during snowy conditions.

The reporter has highlighted that these horns become congested with snow during flurries and staff cannot sound them when needed. According to the reporter this is as a result of the sleeve used to cover the horns becoming ineffective when trains drive into flurries and also possibly because of their poor positioning. They are concerned that it only takes a small amount of snowy weather to render the warning horn defective.

Normal procedure is for a driver to alert the signaller that their horn has become defective and subsequently trains must travel at 20mph which, the reporter states, is not ideal when the next destination is many miles away. The reporter believes that a defective horn could lead to difficulties warning track workers of an approaching train.

As a short-term measure, the reporter suggests that a heavier sleeve be used to cover the warning horn. Longer-term, the reporter would like the warning horn to be repositioned, to prevent it becoming blocked with snow.

Could First ScotRail look into this issue and take these suggestions on board?

Response from First ScotRail

First ScotRail have investigated this particular problem which is currently mitigated by fitting a sleeve over the horn to prevent snow ingress. Our engineers have reviewed options considering whether the horn could be re-located but this would involve intrusive modifications. The option favoured would be to fit Trace Heating which involves a low voltage supply to the horn box and this could be retrofitted to existing train horns. A feasibility study will be carried out on each unit type, over the coming months a cost benefit analysis will be carried out.

40656 Signal sighting at Eastriggs sidings

A driver is concerned about the positioning of two new intermediary signals protecting Eastriggs sidings, on the Gretna-Annan route. Both signals are positioned behind bridges and are obscured by them on the approach.

On seeing the green in the distance, without realising the obscured intermediary one may actually be yellow, a driver would be inclined to accelerate up to line speed. If a driver has not been forewarned and is unfamiliar with this route, there is a fair chance of being

surprised by the signal aspect. The reporter states that several SPADs have nearly occurred at this location, underlining the risk posed.

The reporter would like to highlight this signal as a potential SPAD risk to all other drivers who drive this route. He requests that all TOCs driving over this route - Northern, EWS, Freightliner and DRS - ensure their line of route risk assessments factor in this particular risk.

Network Rail is requested to review the positioning of these signals as soon as is practicable.

Why have these signals been put in their current location?

Response from Network Rail

Although some concerns were raised about signal sighting when the G&SWR was being redoubled, we understood that all those relating to main line signals were addressed at the time and no further complaints have been fed through the normal liaison channels - so when the CIRAS report came in, it was a surprise. Network Rail and the Train Companies have reviewed the visibility of the signals protecting Eastriggs (DE663 and DE666), and confirmed that their sighting complies with the standards which apply.

We are a little concerned by the reporter's reference to "several SPADs (which have) nearly occurred at this location", and would like to remind everyone that incidents, including TPWS interventions, should be reported as soon as possible.