

# Network Rail and sub Network Rail sector reports and responses

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## Contents

40618 Staff and passenger safety at Glasgow Central .....	3
40658 What do instructions for crossings users say? .....	3
40636 Fatigue and rostering of signallers .....	5
40669 PTS (personal track safety) card validation .....	6
40676 Defunct extractor fans at Birmingham Snow Hill station .....	7
40587 & 40597 IVRS black spots between Tapton and Wingfield .....	8
40673 DOO monitors and mirrors 'poorly placed at stations in Sussex .....	9
40675 Inadequate shift design for workers.....	10
40555 Haltwhistle signal box.....	11
40681 Change in shift patterns at Gloucester Road signal box.....	12
40507 PA system at Manchester Piccadilly station 'too loud' .....	14
40617 RVV competency and the assessment in the line process.....	15
40656 Signal sighting at Eastriggs sidings .....	16
40686 Assessment regime at Jarvis 'lacks rigour' .....	17
40651 Instructions to signallers on level crossings .....	18

## **40618 Staff and passenger safety at Glasgow Central**

A reporter is concerned about staff and passenger safety at Glasgow Central station during its new late opening hours.

There have been no additional security measures put into place and as a result concerns are expressed about the safety of staff and passengers. The reporter would like to highlight the poor lighting and CCTV in place in both NCP and short stay car parks.

What concerns the reporter most is that there is no direct access to and from the car park (run by NCP) and station entrance. As a result, staff and passengers will need to walk out on the road during late hours in the night. However, this route is not ideal as the reporter indicates that the levels of crime in Glasgow Central are quite high and the area is especially unsafe at night.

The reporter would like to suggest that some form of transport be provided to take people directly into the station so that they will not need to walk during unsafe hours of the night.

Could Network Rail work with NCP to arrange this for staff? Are there any shorter-term solutions that can be arranged in the meanwhile?

## **Response from Network Rail**

Regarding the reporters comments it is important to list a number of key facts.

The closing hours of Glasgow Central station have remained unchanged for a number of years now and there are no new closing hours. In contrast the opening hours of the station altered in December 2008 with the station opening one hour earlier Monday to Saturday.

In regards to lighting and CCTV, Network Rail has made continuous improvements to both the condition and facilities at this station. Most recently an entirely new system of CCTV has been installed aimed at improving both safety and security. This new CCTV system relies on lighting to be of a good standard and prior to installation tests confirmed that this is the case for all areas of the station.

In regards to references made to the NCP car park; this facility is entirely separate from the operation and management of Glasgow Central station. This car parking facility, which is adjacent to the station building is used under contract by some Train Operating Companies and the connecting door to the station should be opened by the owners of this car park some 35 minutes before the early morning opening hours of the station.

If users of the car park experience difficulties with facilities it is recommended that this is reported to the car park owner (NCP) or to their own respective management team who contract in this facility.

## **40658 What do instructions for crossings users say?**

The written instructions on signs at user worked crossings are highlighted as a fairly common concern amongst signallers working at many locations across the country. The reporter, a signaller himself, believes a lack of clear written instructions in front of crossing users may import considerable safety risk, especially for unfamiliar users who are travelling in a vehicle and need permission to cross. He would want to know what the instructions in front of the user actually say, and whether they are in fact consistent at different locations.

The exact content of these written instructions clearly has the influence to direct user behaviour.

Experienced users of level crossings are generally aware that they are expected to open the near and far gates of a crossing, then phone the signal box to ask permission to cross – in that order. But problems may occur where unfamiliar users struggle with unclear instructions.

The reporter says that their behaviour patterns differ from those of experienced users. Unfamiliar users tend to phone the signaller, and then proceed to open the near and far gates. This may take an estimated four or five minutes, as opposed to 10-15 seconds for an experienced user who is already prepared to cross by opening the gates first – all they have to do is take their vehicle across and close the far gate behind them.

If the signaller makes the reasonable assumption that a user is ready to cross, assuming the gates are open when they are not, a user may find themselves with far less time than they actually have. The reporter conveys how dangerous this can be, citing the details of several near misses, which cannot be disclosed by CIRAS, where unfamiliar users have found a train rapidly approaching when they are not yet clear of the crossing.

The reporter has sought a satisfactory response through internal channels, but has been unable to obtain one. He asks for clarification on the following points about the instructions for users at level crossings:

- What do they say, and is there a standard wording?
- Are they uniformly provided at crossings across the country?
- Could signallers be made aware of the instructions posted at the crossings they manage, perhaps as part of their training or briefing?

The risk posed by unfamiliar users on level crossings is not as widely discussed or researched as the one posed by reckless drivers who violate the rules.

Is this topic worthy of further investigation?

## Response from Network Rail

Thank you for this report. Level crossings represent one of the higher risk areas of operations for Network Rail, and as such the subject of instructions to users (and understanding of this by signallers) is of paramount importance.

The signage in use is in accordance with relevant legislation, the *Private Crossings (Signs and Barriers) Regulations 1996*, and Railway Group standards. Instructions to users do vary to a small extent, and this is a reflection of the type of crossing and the protection equipment present. Instructions are typically as follows:

User Worked Crossing (UWC):

- Stop, Look , Listen
- Notify crossing operator before crossing with a vehicle which is unusually long, wide, low, heavy or slow moving
- Open both gates and look in both directions before crossing
- Cross quickly
- Close and secure gates after use

UWC + telephone:

- Stop
- Always telephone before crossings with vehicles or animals to find out if there is time to cross
- Tell the crossing operator if the vehicle is large or slow moving
- Open far gate before crossings with vehicles or animals
- Cross quickly
- Close and secure gates after use

UWC + miniature red/green lights:

- If no light – phone signaller
- Check that green light shows
- Open **both** gates
- Check that green light **still** shows
- Cross quickly
- Close both gates

There may also be some additional signage on the approaches, such as:

- Drivers of long low vehicles phone before crossing
- Drivers of large or slow vehicles or of animals – phone for permission to cross

These instructions are consistent across the country (subject to some very minor variation in the wording, e.g. “If no light – phone signaller” vs. “If no light – phone crossing operator”) and make clear that the instruction is always to check it is safe to cross (by looking, contacting the signaller and/or checking the warning light) **before** opening the gates.

Safe use of level crossings, in particular the user worked type, is the focus of a number of ongoing work streams within Network Rail, and issues related to this are included as part of the signaller briefing cycle, as appropriate: consideration of the inclusion of this information in a future brief will be made.

## 40636 Fatigue and rostering of signallers

Concern has been expressed by a driver that there appears to be a shortage of signallers in the east and north Scotland area. The shortage of signallers is apparently causing the existing staff to work excessive hours to cover shifts.

The reporter has noticed that the signallers in this area are suffering from fatigue and the reporter is concerned that these staff could accidentally fall asleep during their shift. The reporter notes a couple of occasions where he or she has been made aware that drivers have witnessed signallers ‘nodding off’ on duty.

Recently unmanned signal boxes are being reported more frequently and the reporter is wondering whether this is a result of staff shortages.

Please could Network Rail re-assess current staffing levels in light of this report?

Additional information

The reporter would like to highlight that this report is not meant to place blame on the signallers, as the reporter believes that have been placed in difficult situation by the current working conditions.

## Response from Network Rail

The report is not specific about where the alleged shortages exist. Like many areas across the country, there are varying numbers of vacancies at any given time for a number of reasons. However, the company measures the level of excessive working that takes place through monitoring of *Hidden Breaches* and the Scotland East Area is not showing any indicator to suggest it is notably worse than elsewhere in the country or that the trend is unacceptable or deteriorating.

Regarding allegations that drivers have noticed signallers nodding off, Network Rail has no record of a report to that effect from a driver, nor has there been a recent performance or safety event where investigation has recorded that signaller fatigue was the causal factor.

Signal boxes do get switched out occasionally during periods of train running. The facility is there specifically to accommodate this at a limited number of signal boxes in the East Coast North section where the signalling system is designed to do this in a safe and controlled manner.

## 40669 PTS (personal track safety) card validation

A reporter is seeking clarification about the way in which personal track safety (PTS) card validation occurs.

The reporter has become aware of a railway worker with a heart condition who recently had his PTS card revalidated. However, a medical check or assessment was not part of this validation process and the reporter is concerned that the process may not have been conducted with rigour and thoroughness.

Could Network Rail please clarify whether a person working on the railway is required to disclose medical conditions when undertaking PTS card validation?

Is there a difference in the standard of PTS card validation for those working mainly in an office environment to those working on the track?

Are there any circumstances under which a medical check is not required?

## Response from Network Rail

Network Rail thanks the reporter for their comments and questions about the medical aspects of the Track Safety Competencies.

There is only one process for the medical assessment of those holding Track Safety Competencies, including PTS. This is set out in Network Rail Company Standard, *NR/L2/OHS/00124, Competence Specific Medical Fitness Requirements*. For PTS holders medical assessments are required at intervals related to the age of the individual. For individuals less than 40 years of age the interval is every 10 years, for those 40 or over but less than 50 the interval is every 6 years, for those 50 or over but less than 60 the interval is every 4 years, for those 60 or over but less than 65 the interval is every 2 years and for those 65 or over the interval is every year. Re-examinations and re-validation of medical fitness under this standard is independent of the re-validation of the competencies held by an individual. Therefore, provided that an individual has a valid medical at the time that their competence (ie. PTS) is re-validated they are not subject to another medical examination.

Between medical examinations carried out under *NR/L2/OHS/00124* it is the responsibility of the individual to notify their employer or sponsor of any change in their health status that could affect their fitness for duty. When notified of a change of health status the employer or sponsor may refer the individual to a medical provider to re-assess their medical status under *NR/L2/OHS/00124*. If at that stage the individual fails to meet the medical requirements the related Track Safety competencies would be withdrawn.

## **40676 Defunct extractor fans at Birmingham Snow Hill station**

A reporter is concerned about the effects of ineffective and inefficient extractor fans at Birmingham Snow Hill station on staff health.

The defunct extractor fans pose serious health risks to workers at the station. As a longstanding issue, workers at the station are being exposed to harmful diesel exhaust fumes which could lead to health problems. There is also a slight risk to the health of passengers travelling through the station on a regular basis.

Diesel train exhaust fumes at this semi-closed station are extracted through a 24-hour operation of several extractor fans situated in the ceiling of the station. A light panel indicates if extractor fans are working by showing green lights; red lights appear if they aren't working. The reporter states that the lights are red most of the time, with one or two fans working intermittently. Last summer, there was a period of six weeks during the summer when the extractor fans did not work at all. At present, this is also the case.

The reporter believes the extractor fans are inefficient and ineffective. They are aware that they were installed about 20 years ago – since then more trains pass through the station and this increases the amount of diesel smoke in the station. The problem is compounded by the fact that the entire fleet of London Midland trains comprises of diesel trains, most of which are quite old and receive maintenance only on their scheduled maintenance days.

Although this concern has been raised with London Midland Trains, the reporter states that there appears to be a communication issue between London Midland and Network Rail with regards to this issue. The reporter states that Network Rail are aware of this ongoing problem, but very little has been done about it. A recent inspection by a Network Rail member of staff showed that the fans were clogged with dust and dirt.

Working extraction facilities are required at this station to provide clean air for staff. At present, the reporter believes the minimum air quality standard isn't being reached and suggests the extractor fans and air filters are thoroughly cleaned, and if required, repaired or replaced urgently. Could this be arranged?

The reporter also states that the London Midland station staff previously used to have access to the controls of the light panel indicator board so that faults could be rectified.

Would Network Rail explain why this practice has stopped? Is it possible for London Midland staff to have access to it again?

## **Response from Network Rail**

Thank you for raising this concern.

The extraction fans are a Network Rail asset which is leased to the Train Operating Company (TOC) as part of the station.

As such the maintenance responsibility lies with the TOC and it was brought to Network Rails attention that scheduled maintenance had not been carried out by Central Trains at the time when the Franchise was transferred to London Midland Trains in November.

It was subsequently agreed that Network Rail Property Maintenance would carry out remedial works and the costs would be billed to Central Trains under the dilapidations process.

This work is in the process of being completed and three of the five fans have been cleaned and their motors repaired / refurbished. The remaining two fans are due for completion very soon.

London Midland should have access to the light panel as they are responsible for monitoring and maintaining the system.

## **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 know 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 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.

## Response from CrossCountry Trains

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.

## 40673 DOO monitors and mirrors 'poorly placed at stations 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 platforms 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.

## **40675 Inadequate shift design for workers**

A reporter is concerned about inadequate shift design during weekend possessions.

The main issue relates to the length of time it takes to book on and off jobs. The reporter highlights that although booking on is included in their diagram, the worker is often not relieved when they should be due to the time taken for the next person to book on.

It then takes a long time for the worker to book off once he has been relieved. This may mean that a shift could last as long as 13-14 hours.

Additionally, many workers have a long commute to and from their worksite. The long hours amount to inadequate rest time between shifts and can generate high levels of fatigue and compromise safety.

The reporter would like to suggest that Carillion ensure that their workers are not working more than 12 hours by revising shift diagrams to incorporate shift changeover time.

## Response from Carillion

Carillion Rail operates to its own procedure that has been written following the consideration of the requirements of the following documents:

- Working Time Regulations
- *NR/SP/ERG/003* – Control of Working Hours for those undertaking Safety Critical Work
- *NR/GN/INI/001* - Guidance on the management of door to door work and travel time

Management are mandated to ensure that the total shift time including “Door to Door” travel does not exceed 14 hours with a maximum site time of 12 hours (except in an emergency and then only when authorised).

Note:

1. There is no maximum travel time within the 14 hour door to door limit.
2. Door to Door = a period of time identified as the combined total of travel time and work time.
3. Rest Location = home or other temporary place of residence where rest can be achieved.
4. Travel Time = a period of time directly from rest location to place of work, irrespective of terms of payment or modes of transport, which also includes a return journey.

Considering the requirements imposed on line management the problems highlighted by the reporter above should be the exception rather than the rule. However without direct information as to the site the information does not allow much more than this general response to this concern.

The respondent would like to stress that Carillion Rail Senior Management Team promotes a strategy of “Behaving Safely” where employees are encouraged to provide feedback such as this direct, either verbally or through our “Don’t Walk By” process. We are working hard to foster the culture that all staff appreciate that such feedback is welcomed openly and is accepted without fear of any recrimination. Direct feedback allows suitable response to be targeted following review of the circumstances related to the specific concern, therefore the respondent would welcome the reporter contacting him direct so as this concern can be addressed with the specific site or contract.

## 40555 Haltwhistle signal box

The continuous noise emitted from the new voice recording equipment installed in Haltwhistle signal box is a concern for one reporter. The reporter states that the equipment emits a continuous buzzing sound that staff find both distracting and mentally wearing.

The reporter is also concerned that should staff need to leave the operating floor to use the bathroom they may not hear calls from level crossing users, over the noise from the voice recording equipment. Unlike train movements, calls from level crossing users are unpredictable and therefore staff can not take their personal needs breaks around these. Should a member of staff miss a call from a level crossing user, the reporter is concerned that a pedestrian may decide to cross anyway. The risk of them not hearing an approaching train at this location is high as the track is situated adjacent to the busy A69.

Concern has also been expressed that the draining nature of the noise could potentially lead to staff shutting the door when they are out of the room or using a radio whilst they are in the room to mask the noise. If this did occur both these practices could affect the signallers' ability to hear calls from level crossing users.

1. Has the equipment been trialled in the working environment previously? If so, where?
2. Could the outcome of this trial be provided?
3. Could Network Rail move the voice recording equipment to another location that reduces the mental fatigue and distraction it causes to staff or, alternatively acquire a machine that is quieter?
4. Can Network Rail provide reassurance that careful consideration will be given to future installations of equipment?

#### Additional Information

Due to a fatality in this area previously, the reporter believes that instructions were issued that stated everyone, both pedestrians and vehicle users, must use the telephone before crossing.

#### Response from Network Rail

Network Rail thanks the reporter for bringing this issue to their attention.

Noise trial tests were undertaken in Honiton signal box in Devon and proved to be within regulations and a copy of a report on this can be obtained from the project if required.

The project concluded that no further installations of this type are to be made. However, the local Manager will be consulted - together with the relevant Health & Safety representative for the location concerned - should any bespoke installations become necessary in the future.

#### 40681 Change in shift patterns at Gloucester Road signal box

A reporter is concerned about the changes in shift patterns, particularly on Sundays, affecting signaller's workload and fatigue levels at Gloucester Road signal box.

A new working pattern now means that the previously three 8-hour shifts changed to two 12-hour shifts, with one signaller working panel A and the other panels B and C.

During a shift, signallers are entitled to take two breaks. The reporter states that these are often not taken during the Sunday shifts because it is not possible for one signaller to man all three panels on their own.

Although average traffic levels are lower on weekends than on weekdays, the signaller believes that after 10:00 the traffic levels are near normal weekday levels.

With the added effects of engineering work and amended train working, the reporter feels that the workload is ever more increased and therefore makes working the panels just as challenging as during weekdays.

After changing the working pattern to two 12-hour shifts on weekend's local management undertook a survey about signal box working which the reporter feels was cursory. They state that it did not take into account the fact that signallers could not take a break away from the panel nor that there is an increased workload because of engineering work and amended train working timetables.

In addition, although staff are allowed to call for assistance at any time, this is not always efficient or effective as it can take some people up to an hour to arrive and may not suitably experienced to man the box.

Could Network Rail conduct a thorough review of the changes in working pattern at Gloucester Road signal box and consider reinstating the third Sunday shift?

## **Response from Network Rail**

The local management team within the West Country thank the reporter for raising their concerns.

An independent review of the workloads was undertaken within the signal box at Gloucester prior to any change proposal being made with the staff affected. This review was detailed and measured the workload of a signaller over the period of a month to capture any fluctuations in workload and a good cross section of days were reviewed. The results of this assessment were shared with the signalling staff within the signal box which showed a noticeable difference between week days and Sundays. An assessment was made of service levels of trains' run, compared to the plan, as well as workload from phone calls. The results of this work concluded that the change proposal could be made to reduce the manning levels on the Sunday. The only change that came from the proposal was the middle shift of eight hrs, from 10:00 to 18:00, being removed. The two existing 12 hr shifts remained.

As with any change made, a sensible review process needs to be implemented, and this change was no exception. A review of the change was set up and no problems were found that should stop the change continuing. This review meeting involved the staff from the signal box.

Within the three month period, the Local Operations Manager for Gloucester made two visits to the signal box on Sundays, staying on one occasion for the whole day, where the workloads were as reviewed and no change was felt necessary.

The Local Operations Manager also reviews the work planned for each weekend to ensure that no greater workload is planned that steps outside of the normal expected. Where this happens, an extra member of the team is rostered to work. This has happened on one occasion as well since the change has been made.

Where workload increases through unplanned events, as with any signallers workload within any signal box, a real time review is undertaken and sensible decisions made with the Route Control, and the On Call Manager, to decide what course of action needs to take place.

For example, if the duty signaller needed additional support then, where practicable, this would be provided either by calling in an off-duty signaller or, if this were not possible, by the MOM or an on-call manager attending the location to assist with alleviating the signallers workload by performing tasks that the individual was personally competent to carry out.

A recent review of the signal box and its opportunities for breaks from the signalling equipment has taken place in parallel with this change questioned. This found that the existing review conclusion was still appropriate for the current workload levels, was compliant to the expected procedures governing this area and resulted in no change being felt necessary.

A dynamic review of workloads continues at Gloucester, as it does with all signal boxes, through the safety critical duties of the Operations Manager and his team.

### **40507 PA system at Manchester Piccadilly station 'too loud'**

A reporter is concerned about the volume of the public announcement system at Manchester Piccadilly station. Members of staff dispatching trains at designated points near speakers find it difficult to hear any messages coming over their radios. They cannot be heard when trying to relay messages to other staff either. Passengers have also complained that they cannot hear what is being said when they talk to staff during the frequent announcements. Announcements are being made 70-80 per cent of the time, the reporter comments, making it extremely difficult to hear radio communications. The reporter adds that it is also a problem for staff at the information point on the main concourse opposite platform one.

Network Rail have previously said that the volume level of the public announcement system has been tested and is appropriate because there are high speed trains (HSTs) passing through. However, the reporter comments that HSTs rarely pass through the station anymore. To reflect this new situation with fewer HSTs, could the situation be reviewed?

### **Response from Network Rail**

Network Rail thanks the reporter for bringing this matter to our attention. Manchester Piccadilly operates an intelligent system of public announcement where volume levels increase and decrease automatically, controlled by remote sensors, to ensure that announcements can be heard only a margin above the ambient noise level.

A specific survey has been undertaken confirming the systems performance meets the original specification. The frequency of announcements at Manchester Piccadilly will always remain high compared to some other locations due to the average of 1400+ train movements each day. Effort has been made to find the correct balance for information provision and it is felt that any reduction could pose additional distraction to dispatching staff as increases in individual public requests would likely divert their attention from the task at hand.

It should be noted that the PA speaker opposite the platform 1 information point had been disconnected at the time of the CIRAS report being received and has not been reconnected to the original setting.

Having now received the technical report, Network Rail will lead a local review to be conducted by the three dispatching Train Operating Companies at Manchester Piccadilly - to include safety representatives - to check that communication between staff either via radios or speech does not jeopardise the safe movement of trains or passengers, the outcomes of which will be briefed at local level.

## 40617 RRV competency and the assessment in the line process

Concern has been expressed that staff who undertake the road rail vehicle (RRV) assessment in the line for machine or crane controller competency are not getting up to date codes of practice. This is resulting in numerous staff failing the classroom based assessment because the information they have is in some instances two years out of date for example the codes of practice they receive are sometimes from 2006. The reporter feels that the assessments done previously at the training schools were more effective than the current training provided, as it allowed for staff to undertake practical scenarios and spend one-to-one time discussing situations with an assessor.

- Can Network Rail detail the reason for the change in the way the assessments are carried out?
- Is there any possibility for the assessments to incorporate the methods used in the training schools?

Also, the reporter is concerned that there appears to be inconsistency amongst managers regarding passing staff who have not gained the 100 per cent pass mark required for the RRV assessment in the line competence. The reporter believes that some managers are passing people who have got several questions wrong whilst other managers are refusing to do this.

- Can Network Rail clarify whether managers should be passing staff who have not gained the 100 per cent pass mark required?
- If this is acceptable, could all managers be briefed that this is an acceptable practice so that there is consistency amongst staff?

### Additional information

Please note that due to concerns over confidentiality unfortunately details regarding locations can not be provided. CIRAS appreciates that this may be reflected in the response provided.

## Response from Network Rail

Staff should report lack of access to controlled publications to their line manager. Main points are addressed in order:

1. Network Rail have changed the way in which assessments are carried out in order that line managers take full responsibility for the competence of their direct reports. Line managers now make assessment decisions, and are much more involved in and aware of the competence of their direct reports.
  - a) All such line managers received assessor training prior to being authorised to assess their staff.
  - b) Line manager (assessors) must have the support of a competent person, whilst making decisions on a persons competence for which they are not competent themselves.
  - c) The on-line knowledge test is a 'bit part' of the overall assessment process. The line manager is responsible for ongoing monitoring of Machine & Crane Controllers whilst undertaking their duties.
  - d) The manager will use a variety of evidence which naturally occurs, i.e. work records / reports / incident correspondence / work plans etc. These are used together with knowledge questions, to form the basis of a 1:1 assessment review meeting between the line manager and delegate.

- e) Therefore the delegate has an opportunity to air concerns with the line manager, who in turn has an opportunity to assess any questions which were answered incorrectly, and is able to make a judgement on appropriate development action.
- f) Development actions are not limited to, but may include such items as, formal briefing / self study / or full retraining as necessary.

2) The line manager may request formal retraining for a delegate as part of the assessment process, where the delegates competence is found to have degraded to such an extent that merits full retraining.

3) Managers can award a pass result to delegates who have less than 100%. There are a number of 'optional' questions within each test bank and the manager is able to consider any knowledge gap and recommend appropriate action. Delegates, may have a higher mark and fail a test, whilst others pass the same test, this is normally due to the delegate failing a mandatory question. A mandatory question is one which requires all parts of the answer to be correct, due to the safety critical nature of the question, and any associated risk.

4) All managers (who are approved assessors) have received formal assessor and AiTL training. They also receive regular visits from the independent competence assurance team of verifiers and competence assurance specialists, designed to provide just such consistency.

## **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.

## **40686 Assessment regime at Jarvis 'lacks rigour'**

The assessment regime at Jarvis Fastline in the Manchester and Liverpool areas is being questioned by one reporter. Assessments for on-track machine operators are reported to be far less rigorous than they used to be. Cost-cutting measures are said to be resulting in machine operators being assessed as competent to drive routes when, in actual fact, their route knowledge is lacking.

The reporter highlights several points:

- basic features of a route have often not been learned: (locations of multi-spad signals and route indicators, gradients, and low adhesion sections);
- operators are being fast tracked through assessments with open encouragement;
- route cards are being ticked without fully questioning operators' knowledge; and
- operators signed off as 'competent' don't always know routes well enough to be able to challenge the signaller if they are routed wrongly.

The root cause, the reporter suggests, is a lack of assessor input with assessments being squeezed by staff shortages. In practice, assessments are no longer treated seriously as an integral part of the safety management system. The concern is apparently widespread amongst machine operators at the Edge Hill depot in Liverpool, and at the Guide Bridge depot in Manchester.

The reporter would like to see the whole issue addressed to restore confidence in assessments.

## **Response from Jarvis Fastline**

The assessment of route learning is carried out in accordance with company procedure *JRAIL/OPS/P003* and has not been subject to any changes that would "dilute" the requirements of the assessment process.

There is a permanent notice in the notice case at all depots that states "*If at any time you feel that you are no longer fully competent in route knowledge and wish to cancel or amend your route knowledge record, you must inform your Operations supervisor, Line Manager*", this allows for route refresher training to take place. We have not been approached by any operators in this area requesting refresher training.

During basic driver training, trainees cover the principals of the route learning module which explains what route information they require to safely drive over it, including where the information can be obtained from, sectional appendix, route risk assessments etc. Drivers are taught from the very beginning what is required of them and that if they are in any doubt with any aspect of their knowledge they should not sign to say that they are competent.

Since this report was received, we have canvassed the opinions of union representatives, supervisors, assessors and a number of driver/operators, the unanimous consensus was that the reporters view was not a true reflection.

Some drivers said there may have been an element of truth in the past because the assessor was not as thorough as he could have been but this was one individual that no longer carries out assessments.

Notwithstanding the above comments, a brief will be issued to all depots to reiterate the point that it is the drivers responsibility to sign a route only when passed as competent through assessment **AND** they feel they have sufficient knowledge of the route.

## 40651 Instructions to signallers on level crossings

A signaller would like to highlight what he believes to be an increased safety risk following recent Network Rail briefings on handling crossing users. In accordance with the *Rule Book*, signallers are expected to ask users of 'large, low or slow-moving' vehicles to phone back once safely on the other side. But the reporter is concerned about the procedure for those in vehicles that do not meet the above definition and are not listed in the *Rule Book*. This is a nationwide issue.

Signallers have in fact been instructed **not to** ask such users to phone back once on the other side of the crossing. However, some signallers have been formerly trained to ask this other category of users to phone back when the gates on the other side of the crossing are closed. Indeed, the reporter views this as safer practice – otherwise, there is no phone call confirmation that the gates have been closed. Real-time system feedback is therefore lacking. Phones are generally installed at level crossings to reduce the risk of accident – isn't it counterintuitive not to require some users not to make full use of them?

It shouldn't really matter what the use of the crossing is, the reporter argues, the point is to ensure the gates are closed by the public. And if they are not specifically instructed to phone back by the signaller, they are less likely to close them.

Unless informed otherwise, it is argued that a signaller in these circumstances should assume the gates are still open and caution trains. Clearly, if the public habitually left the gates open, and didn't phone back, this would create delays and be an obvious performance issue. But the reporter argues that if the signaller instructs crossing users correctly over the phone, they very rarely neglect to close the gates. The very occasional lost minutes when a member of the public forgets to close the gates following clear instruction are said to be generating a disproportionately strong reaction.

For Network Rail

Please comment on the reporter's perception that the currently briefed procedures may import additional safety risk. Why aren't the public in 'unitemised' vehicles (not 'large, low or slow-moving') being asked to make use of the phones apparently installed for their safety?

For the RSSB

The definition 'large, low or slow-moving' is perceived to be rather vague. A car starting from a standing start could be considered 'slow-moving' and a four by four might be considered 'large'. But operational experience suggests they are not in fact viewed that way – so what would legitimately fall into this category, and where is the dividing line?

The reporter believes that the rules are ambiguous in relation to users crossing in vehicles which are **not** 'large, low or slow-moving' as referred to in *Rule Book module TS9*. There is no clear guidance on whether or not such users need to phone the signaller back once the gates are closed.

Could RSSB please also comment on the correct interpretation of the rules for signallers handling vehicles which are not considered 'large, low or slow-moving'? If there isn't a 'correct interpretation' what is the rationale for not having one?

## Response from Network Rail

The design and correct use of level crossings within this company is a strategic objective of Network Rail to eliminate this risk where possible and to make sure the safety of those using the crossing, as well as the safe delivery of its business.

Such is the energy to reduce risks from level crossings, Network Rail has embarked on a program to close 150 user worked crossings, at a cost of £12m between now and March 2010. This is a significant initiative to reduce the safety so far as reasonably practicable. Network Rail in addition will not look to support the opening of any new crossings, and look to find alternative safer methods of crossing the railway.

When asked for permission to cross by a user, the signaller must ascertain what is being intended to take across the line and how long is required. Each crossing will have its own characteristics and each user varying vehicles. If animals on the hoof or large or slow vehicles need to cross then the signaller must provide signal protection, agreeing a suitable interval between trains and a ring back is given by the user to confirm that the line is clear. If 'normal' vehicles requiring less time (typically up to three minutes) need to cross then signal protection is not necessary and the signaller must ascertain if sufficient time exists before the approach of the next train to allow the user to cross. In this circumstance a ring back should not be requested or expected.

If every user were to be given signal protection and requested to call back then finding sufficient intervals between the passage of trains would prove extremely difficult and would lead to either to train delay or to users being delayed unnecessarily. Experience has taught us that if delayed too long, crossing users are apt to cross anyway, without the signaller's permission – or not to use the phone at all thus greatly increasing the operation risk at that crossing.

## Response from RSSB

Although it is not quite clear it is presumed that the inquiry concerns occupation and accommodation crossings as dealt with in *Rule Book module TS9, section 7*. Calls about exceptional vehicles and animals can also be received from AHBC, ABCL and red/green light crossings but in these cases *module TS9* always requires a call back from the user.

Occupation and accommodation crossings are user worked crossings and the view of Her Majesty's Railway Inspectorate is that users of these crossings are responsible for their own safety and that of the users of the railway, although they may be unaware of the latter responsibility.

The principle of a signaller, receiving a call from an intending user of one of these crossings, ascertaining what is required to pass over the crossing and how long this will take and then deciding if there is sufficient time for the crossing to be used or not is unchanged during the last 30 years.

If during the initial conversation to establish what is to be taken over the crossing it becomes apparent that animals or a large or slow vehicle is to be taken over then the signaller cannot give permission for the crossing movement until the protecting signals have been placed to danger and any train which has passed these signals has passed over the crossing.

Having given permission for such a movement the signaller requires a call back to confirm that the movement has been completed.

There is only a purpose to requesting the user to call back if trains are prevented from approaching the crossing until such a call back is received. Although from a logical safety perspective ideally a call back would always be requested, it has always been accepted that adopting such a procedure for all movements would severely restrict the occasions on which permission to cross could be given. This is because the protecting signals first have to be at danger and they may be some miles from the crossing. If users are regularly denied permission to cross but are then delayed for several minutes before a train passes they become reluctant to use the telephone and revert to deciding if it is safe to cross based on whether they can see or hear an approaching train. The present arrangements are therefore a balance between a safe system and a pragmatic system that users will tolerate.

Whilst it is easy to understand what an animal is it is more complicated to define what is a large or slow moving vehicle. For instance a tractor with a particular implement attached may only just fit through an eight foot wide gate and may be slow moving at one crossing. However, at a crossing with twelve foot gates there would be no difficulty and the same combination would not need to be considered as slow moving.

Of course if there are particularly local difficulties or convenient protecting signals the signal box instructions can specify that any request to use a particular crossing can be dealt with as a large or slow moving vehicle. RSSB is aware that this has been the case at a limited number of crossings in the past but cannot confirm that such arrangements still exist.