

IN THIS ISSUE ▼

TOCS and Infrastructure:
Pages 2-3

Platform and Station Issues
Pages 4

Signalling:
Page 5

London Underground:
Page 6

CIRAS is a completely impartial system that provides a way for rail industry staff to report safety concerns in confidence.

However, concerns about safety should be raised through company channels first. If you feel this is not possible then contact CIRAS.

Confidential, impartial and across all sectors.

Learning to share, sharing to learn!

Here at CIRAS we work hard to provide added benefits to the rail industry and those working in it. One of the best ways for CIRAS to do this is through

knowledge sharing. Your report doesn't just stop with the CIRAS rep that is involved. As well as publishing selected reports in *The Reporter*, we also publish more reports on the CIRAS website and send them to every CIRAS rep across all sectors of the industry every two months. By sharing your safety concerns and the companies' resolutions, everyone working within the rail industry can learn from these reports, seeking to ensure that even the smallest of oversights aren't repeated. This in turn helps the rail companies towards optimum safety.

A subject that has recently been reported on more than one occasion is level crossings. In this issue of *The Reporter* you will find two reports – both with positive resolutions – about level crossings. Noticeably, both reporters were



concerned that the safety of the crossings may be jeopardised if staff couldn't be sure why a gate wasn't open. Raising this issue has given the companies involved the opportunity to review procedures, make any necessary changes, and ensure their staff continue to work

safely. Thank you to the reporters for raising these concerns and to the companies in question for resolving the issues.

The Reporter will, of course, bring any future valuable lessons to continue sharing lessons learnt.

Fact versus fiction

Through conversations with you at the various exhibitions and events CIRAS has attended, the team has noticed there are some common myths and misconceptions about CIRAS. Each issue we will focus on clarifying the truth about a different common CIRAS myth. **Myth: reporting to CIRAS is anonymous**

Myth:
reporting to
CIRAS is
anonymous

Fact: Reporting to CIRAS is a confidential process, not anonymous. CIRAS will take the details of your report and your contact details. These

details are required so that we can stay in touch with you, and provide you with feedback from the companies involved.

These details, and any identifying information, are then removed before sending on to the relevant company or companies. Since its inception, CIRAS has never compromised a reporter's confidentiality.



IN SHORT

With help from your reports to CIRAS:

- London Midland have reviewed the cleaning regime at Birmingham Snowhill station to prevent slippery platforms in bad weather; and
- Network Rail and other Operating Companies have worked closely to ensure information regarding major signalling changes that have taken place at Glasgow Central has reached all concerned.

CIRAS NEWS

- CIRAS is exhibiting at the London Underground Health, Safety and Environment Conference on 8 June. We look forward to seeing you there.



- CIRAS is hosting its spring reps' meetings in London and York in June. If your company needs a CIRAS rep and you would like to volunteer, please contact Clare Alder, Communications Manager (020 3142 5361 or clare.alder@ciras.org.uk).
- Come and visit the CIRAS stand at the National Operational Risk Conference in London on 7 July. This is your opportunity to meet members of the CIRAS team who are happy to answer any questions you may have.

EDITORIAL

- Editor: Clare Alder
email: clare.alder@ciras.org.uk
tel: 020 3142 5361
- General Enquiries: enquiries@ciras.org.uk
Please note that CIRAS cannot accept reports at this email address.
- Electronic Newsletter: if you would like to receive an electronic copy of *The Reporter*, email us at newsletterrequests@ciras.org.uk.

Operating incidents at Grand Central

A reporter is concerned about three separate incidents involving Grand Central trains, which all happened recently. The reporter believes that, together, these incidents raise questions about safety at Grand Central and that there are lessons that can be learned from them. Due to confidentiality concerns, details of two incidents are not provided, but the reporter believes they raise questions about the level of driver training.

The details of the third incident are as follows: short formation train terminated – in this incident, DB Schenker control advised Network Rail control that Grand Central's train (1A60) would have to terminate at York. The reason for termination was that the train was formed of two power cars and four trailer cars. That is not a permissible formation for 120 mile per hour running, the reporter says. Five power cars plus two trailers is the minimum length for a high speed train (HST) running at 120 miles per hour.

The reporter points out that a train was going to run 120 miles per hour without the required brake force to stop within expected parameters. Please comment.

Response from Grand Central

It is true that there were incidents involving Grand Central (GC) train services around the time that the reporter refers to. These have been fully investigated, appropriate actions have been taken and where relevant, lessons learnt.

Regarding the 2+4 HST train that operated, at the time this was outside the Network Rail Acceptance Panel (NRAP) operating parameters for Grand Central and again this was subject to an investigation concerning a breakdown in communications that day between the various organisations involved. The incident again raised the question as to why the NRAP certificate for GC had this specific length restriction when other TOCs operating HSTs have no such restriction from NRAP for shorter than normal HST formations at full line-speed. Given that GC had evidence from other TOCs and from a train engineering consultancy that proved the satisfactory braking characteristics of



High speed trains have a minimum length

"a train was going to run 120 miles per hour without the required brake force"

shorter than normal HSTs at line speed, NRAP subsequently agreed to remove the restriction on GC operating shorter than normal HST trains and GC's operating instructions have now been amended accordingly.

GC continuously reviews the suitability of its safety management system and management structure aimed particularly at developing and maintaining robust operating and safety practices within the business. This includes having reviewed and, in a few instances, refined certain aspects of training, monitoring and assessment of safety-critical staff.

Grand Central believes it currently has a team of front line staff and supporting management that are fully competent and motivated to provide a safe and reliable train service for many years to come.

Phone use on level crossings

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

Signallers have been instructed not to ask such users to phone back but some signallers were previously trained to ask this category to phone back. The reporter views this as safer practice – the phone call confirms that the gates have been closed. Real-time system feedback isn't available. Phones are generally installed at level crossings to reduce the risk of accidents. The reporter believes that who uses the crossing is not important, but ensuring the gates are

closed is. And the public is less likely to close the gates unless asked to do so. It is thought that a signaller in these circumstances could

"Why aren't all vehicles being asked to make use of the phones?"

assume the gates are still open and caution trains. If the gates are habitually left open this would create delays and performance issues. If advised correctly over the phone, they very rarely neglect to close the gates. Could Network Rail comment on the reporter's perception that the current procedures may import additional safety risk. Why aren't all vehicles being asked to make use of the phones?

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 ensuring the safety of those using the crossing, as well as the safe delivery of its business. Network Rail has embarked on a program to close 150 user worked crossings, costing £12m, between now and March 2010. This is a significant initiative to reduce the safety so far as reasonably practicable. Network Rail will not support the opening of any new crossings but look to find safer alternatives. When asked for permission to cross, the signaller must ascertain what is being taken across the across the line and how long is required. Each crossing has its own characteristics and each



If delayed too long, users will cross anyway

user varying vehicles. If animals on the hoof or large or slow vehicles need to cross then signal protection must be provided, and a suitable interval between trains and a ring back is needed to confirm that the line is clear. If 'normal' vehicles requiring less time (up to three minutes) need to cross then signal protection is not necessary. The signaller must ascertain if sufficient time exists before the approach of the next train to allow the user to cross and a ring back should not be requested or expected. If all users were given signal protection and requested to call back then finding sufficient intervals between trains would prove extremely difficult and would lead to either train delay or users being delayed unnecessarily. Experience shows 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, greatly increasing the operation risk at that crossing.

The full version of this report and response is available on the CIRAS website.



Should all vehicles be asked to use the phone?

Gates at Melton sewage works level crossing left open

A reporter is concerned that gates at the Melton sewage works level crossing, on the East Suffolk line, are frequently left open. Users of this level crossing are asked to telephone the signaller and get permission to open the gates and cross, after which gates are supposed to be closed again.

However, gates are frequently left open and the reporter fears that this makes users more likely to cross without checking with the signaller. This has been ongoing for about six months according to the reporter, and could result in a collision between a road vehicle, most likely a large sewage truck, and a train. Can Network Rail liaise with Melton sewage works to ensure that their staff do not leave the level crossing gates open?

Response from Network Rail

Melton sewage works is a private level crossing situated on the East Suffolk line. Authorised users of the crossing have a legal responsibility for making sure that the gates are kept shut and the crossing used safely. There is sufficient sighting of approaching trains to enable pedestrians, cars and vans to cross without telephoning for permission, but signs at the crossing instruct vehicles which are unusually long, wide, low, heavy or slow moving to telephone for permission. Surface water from nearby fields drains under a gully on the road approaching the crossing and into a ditch, which runs within our boundary before draining under the railway and into a network of ditches leading to the River Deben.

Unfortunately, the ditch network is very overgrown and allows the road approach on one side of the crossing to become flooded, which may account for the gates being left open. Over recent weeks, Network Rail has removed the weeds in the ditch and hope to clear it in the near future, but clearing this ditch network is the Environment Agency's responsibility. We are working closely with them to ensure this maintenance is carried out, which we believe will resolve the flooding issue. In the meantime, we are writing to all the authorised users of the crossing to remind them of their legal responsibilities and will consider enforcement measures if the problem persists.



The full version of this report and response is available on the CIRAS website.

Walking route made safer

A reporter has several concerns about a walking route which runs from Leicester station to a staff car park. Although mainly owned by DB Schenker Rail (UK) Ltd it is used by staff from DB Schenker, Network Rail and Cross Country. Network Rail is responsible for a short part of the route, nearest to the station. The concerns include: no working lights on the route and only one working light in the car park; undesirables loitering in the car park; an unsecured drain cover which exposed the drain to pedestrians in bad weather; and rubber mats where the walking route crosses the railway tracks, which became slippery in icy weather. All these factors present various safety risks to all staff using the walking route, such as slips, falls and assault, and in particular female staff are vulnerable. Could both DB Schenker and Network Rail please refer to the issues highlighted above and address as appropriate?

Response from Network Rail:



Thank you for bringing these issues to the attention of CIRAS. The broken lights, pot holes, and drain cover were immediately reported and have been repaired. Network Rail will arrange for the planned removal of the vegetation from the top of the wall which will allow ambient light from the street lighting above to better light the walking route. A site meeting between the Network Rail and Leicestershire Police took place on Friday 5 December. The police were under the impression that the problem with the undesirables had been addressed, having been an issue in the past.

They have agreed to patrol the car park regularly and have asked to be kept updated on all future activities of this nature by calling 0116 222 2222 and leaving a message for the Beat Officer PC693. Network Rail has installed locally monitored CCTV to deter this type of activity at this location. A process has been put in place so that the foot crossings are treated daily in the event of any frost.

The full version of this report and response is available on the CIRAS website.

Customers 'misled' by information

The reporter has witnessed, on a number of occasions, that the customer information system (CIS) at Northallerton station is giving misleading messages, during the morning rush hour, causing confusion amongst passengers. For example, the reporter has observed that when the 07.45 Grand Central train is on the approach to the station a 'next train due at platform' message is given followed by 'next train approaching' message. This is then immediately followed by a 'high speed train warning' message to allow a fast train to go through the station. The reporter has observed that passengers with luggage, especially those

"drivers of the fast train have to sound their horn ... to get passengers to move back"

who do not commute on a daily basis, move right to the edge of the platform with their heavy bags when they hear the 'next train due' message, in anticipation for when the train arrives. This has resulted in the reporter witnessing drivers of the fast train having to sound their horn as they come through the station to get the passenger to move back from the platform edge.

Northallerton station is not manned by platform staff, so there is no one available to warn them of the fast train. The CIS is an automated system and the reporter believes that the messages are triggered by where the train is positioned on the infrastructure, not the next train movement. Is the reporter correct in this assumption? The reporter feels that the CIS should be more sensitive to the signal conditions, for example if the 07.45 Grand Central train is stopped at a red signal, the 'next train approaching' message should be delayed until the 'high speed train warning' message has been given, as the fast train will be coming through the station first. Can First Transpennine Express and Network Rail look in to the possibility of changing this to reduce the risk to passengers on the platform?



This station is not manned by platform staff



Confused passengers stand too close to the edge

Response from Network Rail:

The reporter's findings are correct, and there are occasions (although infrequent) when the circumstances that are outlined in the report occur.

Transpennine Express have carried out a risk assessment at Northallerton and are exploring alternative means of making train announcements. However, there is signage that asks passengers to stand behind the yellow line until trains have stopped/at all times.

"Transpennine Express ... are exploring alternative means of making train announcements"

As for the customer information screen automation link - this is linked to the train running system and not the signalling system. The signaller has to make decisions when regulating trains at major junctions so that the most efficient use of the infrastructure capacity is delivered to the travelling public.

It is currently not possible for the signaller to adjust the train running system at this location to alleviate incorrect announcements being made.

SPAD risk at Liverpool Street Station

A reporter highlighted a SPAD risk at Liverpool Street station, where there was a SPAD fairly recently. The risk, concerning platforms nine and ten, is created by the driving cab sometimes overhanging the controlling signal. When too many coaches are berthed at platform nine, the last one overhangs the end of the platform. The controlling signal is then behind the driver's shoulder rather than ahead of the driving cab as expected. A driver not used to the configuration at Liverpool Street, may focus incorrectly on the next signal ahead which could show a proceed aspect for platform ten, causing a driver on platform nine to have a SPAD.

Drivers should wait for the close doors (CD) and right away (RA) indicators but a member of staff at Liverpool Street is not always available to give the CD/RA indicators, increasing the chances of moving off against a red signal.

"currently there is nothing at the buffer ends to indicate where trains should stop"

The reporter would like to ask Network Rail what the limit is for the number of coaches on this platform? Currently, there is nothing at the buffer ends to indicate where trains should stop. Could the risk be better controlled with the system of stop posts employed at Kings Cross?

Could National Express East Anglia confirm how often this situation occurs at Liverpool Street; has this issue been briefed out to all staff who may come across it; do current methods of working take full account of the situation described, especially where platform staff are unavailable to assist; and is there anything else that could practically reduce the risk of having a SPAD here?



Platform nine, Liverpool Street station

Response from Network Rail:

1. What is the limit for the number of coaches on platform nine?

The maximum number of carriages that can be accommodated in platform nine is 12.

2. Could the risk be better controlled with the same system of stop posts employed at Kings Cross?

We would like to thank the reporter for raising this issue which has been the subject of much discussion both internally within Network Rail and with National Express East Anglia (NXEA).

There was a SPAD incident in platform ten at Liverpool Street station on 1 August 2008, which first led to identification of a number of issues. The circumstances in platform ten mirror those in platform nine and the lessons learnt are therefore entirely relevant. The

situation arises because there are two signals on each of these platforms, the mid-point signals being L25 (platform nine) and L29 (platform ten); and the signals on the end of the platform being L27 (platform nine) and L31 (platform ten). This arrangement is required because there are scissor crossovers in the platform between the two sets of signals. The SPAD occurred at L29 signal as the driver observed the signal on the end of the platform (L31) clear for the passage of a train from platform nine via the crossover.

Due to the positioning of the signalling equipment it is possible for the relevant signal to be behind the driver's shoulder as the reporter identifies. The situation is not that the train is overhanging the platform but its position in relation to the mid-platform signal.

Response from National Express East Anglia:

National Express East Anglia (NXEA) would like to thank the reporter for contacting CIRAS regarding this situation. All drivers were briefed regarding this situation immediately after the SPAD at L29, a practice adopted within NXEA for all SPADS.

Trains that enter onto platforms that are occupied should stop at least two metres short of the train in front. The RA indicator must be used to give the 'ready to start' signal to the driver. NXEA has undertaken an investigation in conjunction with Network Rail regarding this issue. NXEA now no longer plans for top train working in the permanent plan or during engineering works at platform nine or ten at Liverpool Street station.

[The full version of this report and response is available on the CIRAS website.](#)



Changing work order priorities



Priorities are being changed without authorisation

Concerns have been raised about the priority of work orders being changed on the computer system used by maintenance depots on the District line. The current system logs the date and time a work order is opened and closed. However, it is unable to record details of users making changes during this time, meaning that changes to details, including work order priorities, are made without indentifying users.

It has become apparent that some users are changing priorities without authorisation. The main concern is that changing work order priorities could have serious safety consequences. For that reason the operational safety of trains is believed to be at risk. The reporter illustrated this point with an example. Within minutes of a fault being inputted into the

Response from LUL:

This issue was raised at a Fleet Functional meeting attended by health and safety representatives. The concern was addressed and a tighter process has since been implemented. A bulletin was circulated and staff are aware of the new process.

system, its priority had changed from category D, which must be fixed within three days, to category C, which allows up to 18 months to be fixed. If such a fault isn't repaired in the required time, it could seriously limit the braking capacity of a train, potentially causing difficulty in applying the brakes in an emergency. Although changes to the system can be legitimately made, the fault needs to be physically assessed before the priority is changed. It is believed that this practice is happening because the management team is under pressure from the Railway Inspectorate – a recent audit led to the issue of a written warning to close out the excessively high work load. Could LUL investigate this malpractice to find out why it is occurring? In addition, could the possibilities of improving the current computer system used for logging the work orders be explored?

Regular meetings with health and safety representatives are also held via Tier 2 Forums to discuss this and other similar matters. We hope that the reporter is satisfied that the matters raised in this report have been satisfactorily dealt with.

Out-of-tolerance wheels

A reporter is concerned about trains running on the District line with wheels that are out-of-tolerance. If wheels are found to be out of profile then the train is taken out of service. Trains requiring small wheel changes are supposed to remain at Ealing Common depot where the repairs are made. If larger wheels are out of tolerance then trains are taken to Upminster where such faults are repaired.

However, instead of using the dedicated empty stop moves to move an out of service train from one depot to the other, trains are being kept in service and are used during passenger service. The reporter states that this is occurring at least twice a week. Additionally, there is a plant machine, Talgo, which checks wheel profiles before and after a train is in

use. This system is linked to another system called Thomas. If Talgo detects wheels being out-of-tolerance, Thomas automatically doesn't allow that train to operate. The reporter believes the reason Talgo has not been used yet is because the management knows that it will fail almost all of the District line trains. The reporter would like LUL to reduce the potential for derailment during passenger service by only using the empty stop move to transfer trains with out-of-tolerance wheels.

Also, could LUL investigate this issue and provide a better system of repairing the faults on the trains with out-of-tolerance wheels? The reporter suggested this problem might be occurring at other locations across the Underground network.



Are trains being kept in service with out-of-tolerance wheels?

Response from LUL:

LUL has given a lot of thought of how best to answer this report without being too technical. LUL ensures wheels are checked and gauged for service suitability using a 'GO/NO GO' gauge. Any units with wheels that 'fail' the 'GO/NO GO' gauge are not offered for passenger service. Units are either sent on controlled (empty) stock moves to Upminster depot for re-profile

or stopped for wheel change at Ealing Common. There have been operational problems with our Talgo system, however, the issues do not impact on our ability to manage and maintain a safe fleet. The Talgo system does not currently link with THOMAS, however, we are in the process of investigating the possibility of linking the system to Ellipse at some time in the future. LUL notes the

to Ellipse at some time in the future. LUL notes the second part of the question and would encourage the reporter to provide more specific information to allow us to address their concern.

[The full version of this report and response is available on the CIRAS website.](#)

Fold here and moisten inside to seal

**Postage
Paid**

FREEPOST CIRAS