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CONFIDENTIAL REPORTING FOR SAFETY

ISSUE 61 Spring 2017

# Health and wellbeing at c2c

Mark Manser, Health and Safety Manager at c2c tells us how they are promoting health and wellbeing



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## CIRAS UPDATES

- 3 Editor's note
- 4 Winners at UKRIA
- 8 TfL Readibands™
- 12 Bus industry reporting
- 14 Membership update

## REPORTS

- 6 Loss of radio signal
- 7 Lack of heating at garage
- 10 Excessive noise levels
- 16 TSR signage

## GUEST ARTICLES

- 5 Member viewpoint - HEx

### What does a 'well' person look like?

I think wellbeing is a combination of psychological, physical and social factors. Personally, I think a 'well' person is a happy or content person.

### What does a healthy organisation look like?

Companies in the UK are becoming quite innovative in attracting talent and keeping retention rates up. Whether it's a £5k joining bonus, free (healthy) meals and drinks, or in some places, bringing your pets to work! It all helps contribute to both recruitment and making it a more pleasant place to work. I expect modern workplaces will provide environments that are more informal and less populated due to increasingly flexible working practices and therefore have an improved range of facilities. Organisations will focus

tailored support on employees as individuals and not just as a workforce to optimise their performance. There should be increasing opportunities for staff to engage in a variety of evolving initiatives, to provide both personal and professional empowerment, development and progression. I think this will create a more sustainable and resilient workforce and culture which I believe will be incredibly efficient and profitable for most organisations.

### What is c2c doing to promote health and wellbeing in the workplace?

- We have employee panels and survey groups to enable collaborative working on health and wellbeing issues.
- We have introduced interdepartmental lunches and monthly social events.

- We are undertaking HR road shows to answer staff questions on subjects such as training, HR issues, the Employee Assistance Programme etc.
- There are always fundraising events being held to support local charities and these have brought people together. e.g. charity football tournament.
- Last year we launched a new scheme to formally recognise and reward our staff for the amazing work they carry out every day in our organisation.
- We hold a silver award for Investors in People and are aiming for gold this time round!

One of the key initiatives for me was the introduction of Agile working. Agile working is an adaptation of flexible working. Rather than having flexibility



Mark Manser, HSE Manager, c2c

on start and leave times, we provide the option for staff to work at any desk which is empty. By taking advantage of spare desk space we are helping people get out and about on the route, and addressing their work-life balance by making it easier to work from home or closer to home. This also allowed different staff to sit with people they wouldn't normally work or speak with.

Staff still need their line manager's approval for the days they want to work away from the office, and they have to register their intention in a central log. This allows us to identify which desks are spare, and how many people are intending to work in any one location on the route. It's worked really well.

#### What are we doing next?

Reviewing our health and wellbeing strategy for this year we have chosen to undertake a campaign, supported by Public Health England called One You. We are planning to provide events on themes including 'Eat Well', 'Move More', 'Be Smoke Free', 'Check Yourself', 'Stress Less' and 'Sleep Better'. We will try and align this with wider national events, for example Sober October.

We will be launching a 'Check Yourself' month which is a series of lifestyle checks that we will provide to staff. We are also launching an ePoint system to support our reward and recognition initiative and re-launching 'MyStaff shop' which has a section on 'My Wellbeing' which contains links and information on subsidised gyms and discounts for

personal trainers, exercise classes etc.

#### Is there a culture of silence around mental health in the workplace?

I think there is a culture of silence around mental health in many workplaces and the study published in October by Business in the Community (BITC) reinforces this belief. Causes can include it being seen as a sign of weakness, perhaps there is fear of reprisal. I think many believe it will disadvantage them professionally. Colleagues may feel uncomfortable as they don't know how to engage the person or to open a conversation with them.

#### What can we do about it?

Talk to each other. One of the historical issues I have encountered is the difficulty some of us have in talking about mental health issues. It's clear that you can't manage what you can't talk about and this supports the need for more training and awareness in the workplace.

Guidance from ACAS suggests that well trained front line managers are crucial for business performance but need the right tools to help them do their job, and our own campaign planned for next year aims to address this.

#### Are there any special initiatives c2c are involved in that you'd like to mention?

One of the key ideas we are progressing at c2c is for a mental health first aider scheme. We're not alone in

understanding that mental ill-health is one of the leading causes of sickness absence in the UK, and like other organisations we're looking to improve how we support each other in times of need. Mental health first aiders (unlike first aiders) will observe the potential for harm rather than just the harm that has occurred. We can all look out for our colleagues, but I think there is a need for training for a mental health first aider to be effective.

#### What are your views on confidential reporting?

Confidential reporting can save lives. I am a strong supporter of confidential reporting and sharing associated learning. It also reduces the risk of serious matters going unreported and therefore unaddressed.

#### Do you think confidential reporting is valued as much as it could be in the transport sector?

I think it's dependent on the audience. I think it's a valuable tool but the real benefit is using the learning proactively. Challenges others may have experienced can provide learning opportunities for all of us.

Whether you consider these events to be zero cost incidents, near-misses or close calls, what matters is that reported concerns present us with the chance to plan ahead, perhaps allowing us to be more resilient.



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# Welcome from CIRAS

Welcome to the 61st edition of the CIRAS newsletter.

In this edition we celebrate the work our members are doing to make the workplace safer and healthier for their staff and the travelling public. Find out about the exciting Network Rail project that won UKRIA's Workplace Safety Award, which we sponsored in February, and read about TfL's innovative work into fatigue and shift patterns.

There is also the chance to gain some insight into the work c2c is doing to promote health and wellbeing for their staff, and hear what Heathrow Express' Julie Bignell has to say about her own journey as a health and safety professional.

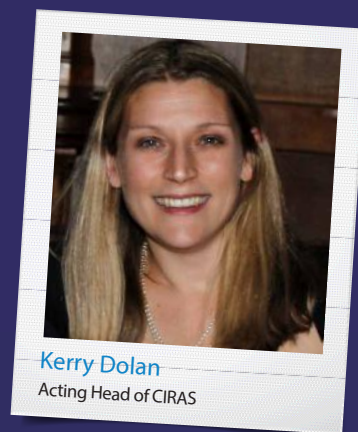
The key theme running throughout is sharing learning. At CIRAS we want to help our members learn from each other. There is a huge amount of expertise and innovative thinking out

there, and the more we can share and learn, the better able we are to make our workplaces safer environments to be in.

Finally – we are conducting a major review of our newsletter's distribution list. In an effort to be as environmentally friendly and cost effective as possible we've issued this edition in electronic copy only, while we undertake our review. We know the hard copies are valuable for you, especially for those staff without access to internet, so please do print this edition off for your mess rooms and depots.

We are always interested in hearing ideas about how we can improve your experience of CIRAS.

Whether its suggestions for sharing good practice and exchange of learning, improving our newsletter and communications, or providing you with a better customer service, please contact us at [editor@ciras.org.uk](mailto:editor@ciras.org.uk)



**Kerry Dolan**  
Acting Head of CIRAS

## Clarification

In Issue 60, we printed a response from Network Rail 'The reporter might be aware that the company added four hours weekday and 10 hours Sunday signaller cover to the panel to recognise the extra workload involved in operating Ley.' It has been brought to our attention that the Sunday cover has not yet been fully implemented. Network Rail are aware of this and there is an ongoing programme to resolve this.

## LATEST REPORTS

# Reports currently being processed

### Slippery platform at Euston

A reporter is concerned about slippery platforms at Euston station and has witnessed many people slipping or tripping.

There may be several factors contributing to the lack of grip experienced by those who access the platforms, including the grime and the build-up of dirt, and the chemicals being used to de-ice the platforms.

The reporter has suggested a review of platform surfaces and the de-icing process.

### Route knowledge

A concern has been raised about the route knowledge On Board Supervisors (OBSs) have at one train operator.

The reporter states that OBSs have limited knowledge of short platforms

and therefore are unable to warn passengers to mind their step during announcements.

The reporter is also concerned that if an incident occurred, OBSs would not be able to effectively describe their location to the signaller, creating a risk for trains nearby as it would take longer to pinpoint the OBS location and warn nearby trains. Additional concerns were raised about cab training for OBSs and their communication with drivers.

The reporter has suggested a review of current training and communication processes.

### Crowding at Clapham

A reporter is concerned about the safety of passengers at Clapham station due to the high levels of passenger congestion experienced during the rush hour peak (usually

between 4.30pm and 6.30pm) at platform 13 and 14.

The reporter believes that there are two factors that may be influencing passenger safety during this time: staff resourcing and limited visibility due to platform curvature.

A review of resource levels and crowd control has been suggested.

### Lack of rest facilities

A bus driver is concerned about the lack of a meal relief facility on a particular bus route. Due to the lack of facilities, drivers are having to eat and rest at fast food restaurants on the high street on their breaks. This contributes to fatigue and affects their ability to drive as safely as possible.

The reporter has asked if alternative arrangements could be requested to address the issue.

UKRIA

# How a bird's eye view of our railway is making the workplace safer

Network Rail's 'Offering Rail Better Information Services' (ORBIS) programme won the CIRAS sponsored 'Workforce Safety' category at UKRIA



*The GRV contains high resolution aerial survey imagery and over 140 data layers*

At CIRAS we believe that positive culture is key to a safe working environment. Companies with progressive safety cultures embrace new ways of improving safety and reducing the risk of incidents. They – and we – believe it is better to prevent a loss (financial, reputational or human) than to deal with the aftermath. We want to highlight the endeavours of those who are proactive in their thinking when it comes to safety – whether it's by embracing confidential reporting or finding new ways to address risk. This is why we sponsored the Workplace Safety Award at the UK Rail Industry Awards (UKRIA) this February.

The award was won by Network Rail's 'Offering Rail Better Information Services' (ORBIS) Programme for their online tool, the Geo-Rail Infrastructure Network Model Viewer – or GRV – which provides a 'Google Maps view of the railway'. Using the GRV, Network Rail staff can now view both map and high-resolution aerial survey imagery of the entire UK rail network.

Every year, we receive confidential reports from rail workers with concerns about safety issues,

and managing risk in a trackside environment is a huge challenge. By combining data from over 140 data layers with its imagery, the GRV gives engineers, planners and maintenance teams a comprehensive view of our rail network and its condition – without having to leave the office. This reduces the need for onsite surveys, and enables worksite planning without anyone being put at risk.

Steve Hobden, Head of ORBIS Delivery, told CIRAS "The GRV means that teams can now plan work more effectively in advance – so when they get on site they already have a better knowledge of the conditions they are going to face, making it easier to work safely. For example, Network

Rail staff can use the GRV to find their nearest access point, check flood risks, measure slopes in the terrain, and annotate their maps to highlight risks."

The GRV is also being used to identify where safety concerns might exist, so that they can be tackled long before an incident occurs. For example, at CIRAS we take reports from time to time from drivers concerned about the impact of vegetation on track and signal visibility. The GRV is being used to identify spots where the biggest risk and impact of encroachment exist, so work can be targeted where it's most needed. Network Rail predicts that, if the GRV is fully exploited, it has the potential to reduce track worker accidents by about 3%. That's one less accident per week across the UK.

The GRV is currently only available within Network Rail, but the ORBIS Programme is working on providing access to approximately 3,500 external users (including the Emergency Services and British Transport Police) to improve response to emergencies on the rail network.

To find out more about ORBIS or the GRV, please contact [ORBIScommunications@networkrail.co.uk](mailto:ORBIScommunications@networkrail.co.uk)



*Acting Head of CIRAS, Kerry Dolan, (right) presenting the UKRIA award to the Network Rail team*

# Member viewpoint: Insights from a CIRAS rep

Julie talks about the safety challenges Heathrow Express face and how they promote a good safety culture within their organisation

**Name:** Julie Bignell  
**Job title:** Head of Safety  
**Company:** Heathrow Express (HEX)  
**Location:** Terminal 3, Heathrow Airport  
**Sector:** Train Operating Company  
**Company size:** 480-500 employees  
**Time spent in industry:** 19 years in Rail & 3 years in TfL Surface Transport

**What is your biggest safety challenge and what are you doing about it at the moment?**

Safety behaviours of both passengers and colleagues remain a concern. This year we will be looking at how we can embed good safety behaviour in managers, front-line staff and passengers. This will be achieved through campaigns and training.

**What advice would you give to other members trying to embed a good safety culture?**

Listen to your staff and lead by example. If you display the correct safety behaviours it encourages your staff to do the same.

**How does your company promote a good safety culture?**

We recently undertook the RSSB Safety Culture Survey and had an amazing 69% response rate with very encouraging results. We will be working with various staff grade groups to look at creating action plans on how to address weaknesses identified in the survey, and build on existing strengths to further improve our safety culture. We promote a good safety culture through the visibility of management to frontline colleagues, talking to them about their safety concerns and ensuring feedback is given to them.

**What is the best piece of safety advice given to you?**

Never be afraid to challenge. If something doesn't look right or safe, it probably isn't – always ask the question, it could save someone from getting injured.

**What is the most common safety concern you come across on a day to day basis?**

Passenger behaviours! Particularly in an airport environment, they may be distracted, carrying extremely large pieces of luggage, be unfamiliar with their surroundings, fatigued through long distance travel etc. and that is when accidents and near misses happen.

**Before working at HEx, what was the most unusual or interesting job you've ever had?**

I've been very lucky and worked with some interesting and knowledgeable people over the years in a variety of roles. My standout role was at TfL where part of my role was being the health and safety manager for Victoria Coach Station, a busy environment with a great group of people. Every day was different with loads of things going on – lots of passengers, ticket office, huge



Julie Bignell

facilities department and many coach movements all in a small area with their own challenges, but very well managed. I loved it!

**Tell our readers something interesting about yourself.**

I have a bright blue 42 year old MGB Midget which is gradually being restored, and which I love to drive on a summer's day.

**What do you think the industry could do to better promote shared learning?**

I think shared learning within the industry has improved steadily over the years but this can always be improved. More forums for sharing best practice through RSSB, CIRAS, Rail Delivery Group (RDG) and Office of Rail and Road (ORR) would also be advantageous as these provide networking opportunities.



© Heathrow Express

# New system designed and commissioned to improve radio signal

Drivers experienced loss of radio signal between Taynuilt and Connel and were unable to communicate with signaller

## THE CONCERN...

A reporter raised a concern about the loss of Radio Electronic Token Block (RETB) radio signal on the West Highlands line between Taynuilt and Connel.

It was reported that drivers often experience a loss of signal within this section when switching from channel 105 to 119.

This results in them being unable to communicate with the signaller for approximately six miles.

This was of particular concern to the reporter as there are six foot crossings with lineside telephones within this section, so communication with the signaller is necessary.

Although guards have been issued with mobile phones, the reporter was concerned that they may also be affected by loss of signal in this area.

### The reporter asked if Network Rail could:

- Identify the cause for the loss of signal within this section
- Clarify how drivers and signallers should communicate when experiencing a loss of signal
- Take appropriate action to resolve this issue

## THE RESPONSE...

A reporter has raised concerns about the loss of RETB radio signal on the West Highlands line between Taynuilt and Connel. Network Rail has investigated this and found interference to be caused by a lightning strike on the antenna of

Oban FM. This caused interference on our equipment.

The reliability of RETB on both areas that currently use RETB signalling has been a cause of concern for Network Rail and there have been several reasons for this.

There have been a number of initiatives which have been undertaken to improve these loss of reception issues, including the erection and replacement of aerials.

A generation base station has been built at Connel Station and this has improved communications between all trains and Banavie signalling centre, currently the signalling system is working as designed and no further issues have been reported.

Investigations were carried out and a number of solutions were identified and implemented as a short term solution, although a change of frequencies initiated by the government meant the frequency band had to be changed.

The investigations found that a whole new system needed to be designed and commissioned using the latest technology and realising significant



© Network Rail

improvements in reliability and reception.

Therefore, based on the fact that this project is underway a few short term measures were viable.

## ACTIONS TAKEN

- A number of small changes made to the system including the creation of a new base station at Connel and the renewal and recalibration of some system aerials.
- Full renewal of the system using latest digital technology.

# Temporary heaters installed ahead of repairs taking place

Staff were left without heating at Willesden Junction garage, an investigation took place and works were identified to fix the issue



© Metroline

## THE RESPONSE...

This fault has not been raised directly with the management at Willesden Junction. They are however aware of the fault.

The heating system is not working due to a fault with two pumps linked to the boiler that had been reported to our facilities department.

Not all of the areas within the building at this garage are affected.

Temporary heaters were installed in critical areas such as the output and drivers' rest room.

A repair had been ordered and undertaken. The heating is now working in all areas.

## THE CONCERN...

A reporter raised concern about the lack of heating in the drivers' area at Willesden Junction garage.

According to the reporter, the heating system in the drivers' area had not been working since November last year. The reporter was unsure if this was due to the heating system being switched off or repairs needing to be carried out.

The reporter commented that as the temperature dropped significantly, it was increasingly cold in the drivers' area of the garage, where drivers could spend up to three continuous hours if they are on a rest break or waiting for their next turn. According to the HSE website, the temperature

in workrooms should normally be at least 16°C, or 13°C if much of the work involves rigorous physical effort (<http://www.hse.gov.uk/temperature/faq.htm>).

The reporter was concerned that this was causing discomfort for drivers and could potentially have negative effects on their health.

The reporter asked if Metroline could:

- Clarify why the heating system is currently not working
- Carry out necessary repairs or switch the heating back on to ensure that the temperature in the workplace environment is adequate

## ACTIONS TAKEN

- Following receipt of this report an investigation was undertaken involving the garage manager responsible for Willesden Junction and the facilities manager who is responsible for commissioning work associated with the heating system.
- The work that was necessary to resolve the issue with the boiler at this site was ordered and undertaken. The heating is now working in all areas.
- Temporary heaters were utilised as a short term measure but now the heating system has been fixed and it is reported to be functioning properly.
- No further long term solution required.

TFL - READIBANDS™

# HSE human factors specialist at Tfl shares research into shift patterns

Research was carried out to better understand the impact of fatigue risks on staff who were working different shift patterns

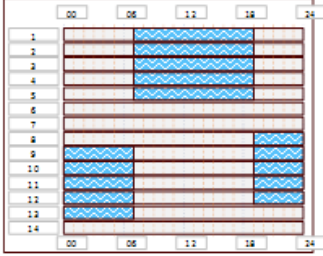
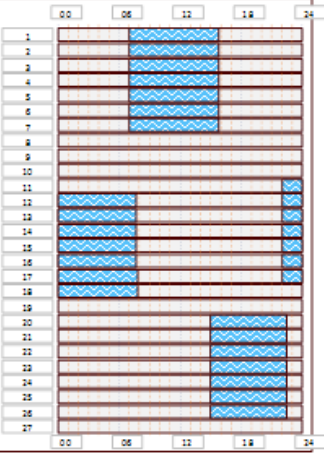
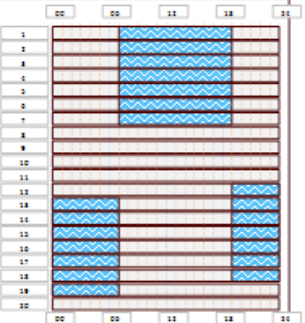
		
<p><b>5252</b></p> <ul style="list-style-type: none"> <li>• 5 days - 2 rest - 5 nights - 2 rest</li> <li>• 12 hour shifts</li> <li>• Avg. 60 hour working week</li> </ul>	<p><b>DNL</b></p> <ul style="list-style-type: none"> <li>• 7 days - 3 rest - 7 nights - 2 rest - 7 late - 2 rest</li> <li>• Day shifts: 8 hrs 45 (07:00-15:45)</li> <li>• Night shifts: 9 hrs 45 (22:00-07:45)</li> <li>• Late shifts: 7 hrs (15:00-22:30)</li> <li>• Avg. 45.5 hr working week</li> </ul>	<p><b>7473</b></p> <ul style="list-style-type: none"> <li>• 7 days - 4 rest - 7 nights - 3 rest</li> <li>• 12 hour shifts</li> <li>• Avg. 56 hr working week</li> </ul>

Table 1

CIRAS talked to Ruth Turner, HSE Human Factors Specialist, at Transport for London (TfL) on her innovative, scientific research into shift patterns and associated levels of fatigue. She presented the surprising results from her research into fatigue in a live working environment. On this research, Transport for London partnered with Crossrail on four construction and tunnelling projects to collect the data.

Ruth is the first to admit that this was a challenge logistically, but says: "It did equip us with real data from the actual population of interest, rather than rely on data from other domains, such as the military and the health service."

The construction and tunnelling industry are renowned for working long

hours and are a fairly unique working population. Staff typically don't live close to site, preferring to stay in temporary lodgings and travel home on a regular basis. The purpose of this research was to increase understanding of the impacts of fatigue risks on staff working a number of common shift patterns.

### High-tech approach with Readibands™

Three different rotating shifts were assessed, along with some permanent days and permanent nights considered for comparison purposes. These shifts are represented in Table 1.

Questionnaire data was collected on a range of things: subjective levels of fatigue; quality of sleep; sleepiness; job satisfaction and lifestyle. But the really innovative part of this research

utilised wrist-worn actigraph devices called Readibands™, enabling the collection of objective data to provide a whole new perspective.

Readibands™ were worn for a minimum of one full shift cycle and automatically generated a detailed sleep/wake, body-clock, cognitive effectiveness and fatigue-risk report. That's a lot of valuable information that doesn't normally get collected in research that relies solely on

subjective self-reports. The measure of cognitive effectiveness can be translated into reaction times, accident risk, and even a blood alcohol equivalence measure.

### Findings

The Readibands™ results identified the permanent night shifts as having the highest fatigue risk and the day shifts having the lowest fatigue risk. This was just as expected.

However, an extremely interesting pattern of findings emerged from a more detailed shift cycle analysis conducted on the three rotating shifts.

One particular shift pattern was significantly worse than the other two in terms of fatigue risk and cognitive effectiveness. Surprisingly, it wasn't the



shift with the most working hours in it, as you might predict.

In shift work, working more hours does not automatically translate into more fatigue. The relationship between working hours and fatigue is a little more complex than one might assume.

It was actually the Day Night Late (DNL) shift pattern, averaging a 45.5 hour working week, that had the greatest fatigue impact, despite the fact the week was 14.5 hours less than 5252 shift pattern. The shift rotations inherent in this pattern clearly had a considerable impact.

It was the 5252 shift pattern, averaging a 60-hour working week and featuring 5 consecutive 12 hour night shifts, that counterintuitively had the most favourable fatigue results overall.

The 7473 shift, averaging a 56-hour working week, was slightly worse than the 5252 shift cycle, although this difference was not statistically significant.

Ruth says “These findings contradicted standard good practice, as well as the findings of the HSE Fatigue and Risk (F&R) Assessment Index findings. They all suggested the DNL shift should be the least fatiguing.” However, it would appear staff working the DNL shift

were not committing sufficient time to sleep.

This highlights one of the flaws of biomechanical modelling tools – in particular, the assumption that if people are provided the opportunity to sleep they will take it.

Ruth explains, “However, we did not find this to be the case, simply giving workers more time for sleep does not necessarily mean they will use this time for sleep.”

Another point is worth mentioning here. Although the night shifts in the DNL pattern were shorter than the other shifts, staff started later.

They were therefore in a more fatigued state to begin with, affecting their overall effectiveness.

**Shared learning**

Following the research work, the DNL shifts were discontinued and the 7374 shifts were modified, to reduce the duration of all the night shifts to mitigate the cumulative effect of fatigue over successive night shifts.

The work did support the existing good practice guidance related to consecutive night working and the notion of limiting this to 3 – 4 nights.

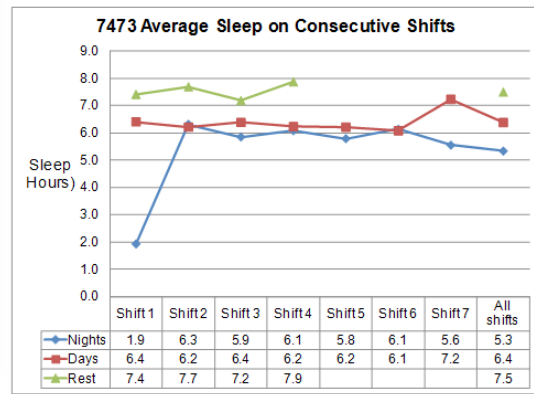
Ruth says, “This work has also helped to raise awareness of fatigue risk for TfL contractors and

we are now reviewing our QUENSH documentation (LU’s contractual Health, Safety and Environmental requirements) to include a specific section on the management of fatigue.”

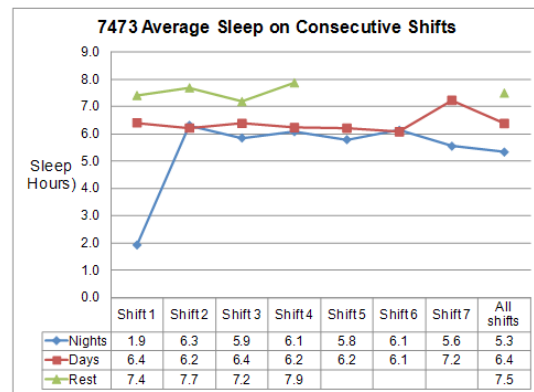
She also emphasises that this is a very specific population of tunnelling and construction workers.

The findings here cannot be readily transferred to other populations, such as drivers or station staff.

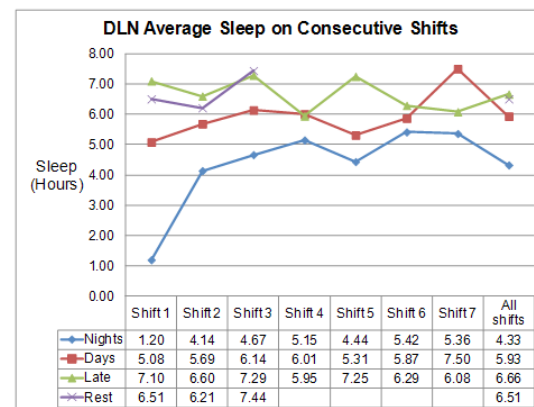
For further information, please contact Ruth at [ruthturner@tfl.gov.uk](mailto:ruthturner@tfl.gov.uk)



Average sleep on different duties of the 7473 shift cycle



Average sleep on different duties of the 5252 shift cycle



Average sleep on different duties of the DLN shift cycle



Readibands™

# Noise assessment of stoneblower machines carried out

Concern over excessive noise levels when driving from the rear cab of stoneblowers



© Harsco Rail

A reporter raised concern about the excessive noise created by stoneblower machines, which particularly affects those driving the machines.

According to the reporter, the noise was excessive when driving from the rear cab of stoneblowers, as the rear cab was positioned above the pumps and drive axels that operate the machine.

The reporter believed that the noise became increasingly excessive over time due to the insulation around the parts in the machine deteriorating and becoming less effective.

The reporter commented that stoneblowers can be driven for up to two and a half hours in one direction, and two and a half hours back, and

was concerned about the effects the exposure to excessive noise may have. Ear defenders cannot be worn whilst driving stoneblowers as it is vital staff can hear any safety warnings or messages.

The Control of Noise at Work Regulations 2005 state that the level at which employers must provide hearing protection and hearing protection zones is now 85 decibels, and the level at which employers must assess the risk to workers' health and provide them with information and training is now 80 decibels.

In addition to being concerned about the long term effects excessive noise may have on staff's hearing, the reporter was also concerned that staff could not hear safety warnings over the noise of the stoneblowers.

The reporter asked if Harsco Rail could:

- Conduct a hearing assessment from the driving position in the rear cab of stoneblowers
- Consider resealing the doors and reinsulating the parts that operate the stoneblowers

## THE RESPONSE...

The reporter requested a noise assessment from the driving position in the rear cab to ascertain the noise levels. Noise assessments were carried out on various positions within the rear cab which included:

- Driver's seating position during transit
- Operator's seating position during transit and

- Operator's seating position whilst track maintenance carried out.

A consultation with the company safety representatives, which include drivers and operators of the machines, was conducted.

They provided information on the areas of potential increased noise hazard and also the potential components that may be a contributory factor in addition to the door seals. The safety representatives also identified one machine which is perceived to have higher noise levels.

Assessments were carried out on two Plain Line Stoneblowers (PLSBs), including the one identified by the safety representatives and a Multipurpose Stoneblower (MPSB). The two PLSBs comprised of a MK1 and a MK2. This is due to a difference in floor coverings of the two respective aged machines.

The MK2 (identified by the safety representatives as the one with increased noise levels) has a solid rubber floor covering and the MK1 has a thicker insulation that potentially abates some of the noise from the drive motors located under the rear cab.

The readings that were taken during the three working shifts were taken using a calibrated noise level meter ISO-Tech SLM-1352N, serial number: 090609222, calibration date 11 April 2015, expiry date 11 April 2016.

The readings indicated that whilst driving the machine from the rear cab driver's seat and carrying out track maintenance from the operator's seat in the same cab, the noise levels are below the first action level on a time weighted average calculated with the use of the HSE noise calculator.

Noise readings from the MK2 machine were slightly higher than the MK1, however the time weighted reading was still below the first action level at 79 dB(A). The machine noise levels varied dependent on line speed and the take up of power, and in some instances the noise levels peaked at 91dB(A), however the time at this



© Harsco Rail

level was very short and over a transit of 70 minutes, this only equated to 53 seconds.

That said, it is acknowledged that the reading is only just below the action level, therefore more noise assessments will be conducted on other machines to ascertain a more comprehensive understanding.

The noise is higher in the operator's seat than in the driver's seat whilst in transit at 50mph and above, but the noise level readings in the operator's seat are below the action levels and a person in this seat is able to wear hearing defence. Generally there is no need for anyone to sit in the operators seat during a transit.

A further consultation is scheduled with the safety representatives for the 10 May 2016 where additional actions will be agreed. A visual inspection was also carried out of the door seals and the location of the propulsion hoses at the rear of the rear cab.

The hoses in both cases of the PLSBs were found to be tight against the cab body, which potentially may be a contributory factor of increased noise whilst sat in the operator's seat.

Harsco Rail are looking at a modification which would move the hoses to mitigate this contributory factor to the noise in the rear cab, and will consider whether an insulating

material will need to be fitted.

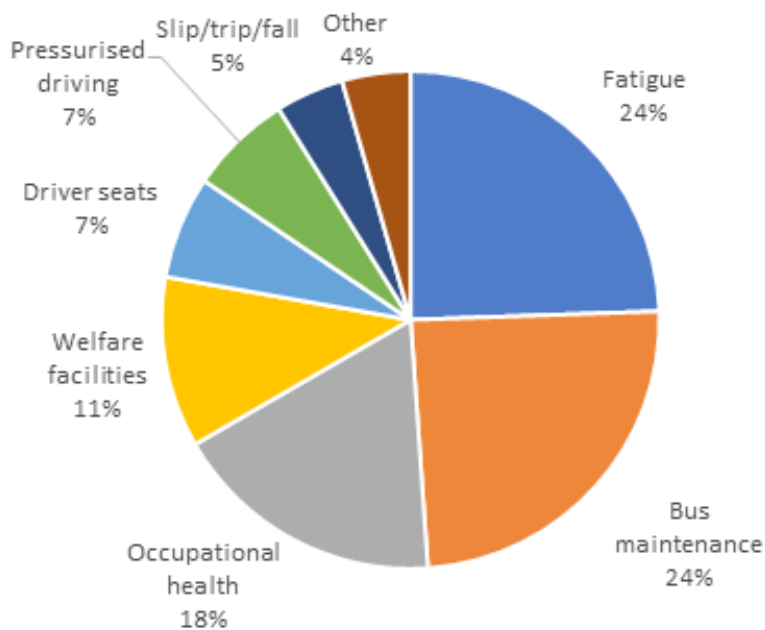
In reference to the door seals, a technical bulletin (TB245) has been published which requires a door seal inspection and repair to be undertaken at three-monthly intervals. An action plan has been developed to enable further noise assessment to be carried out.

#### ACTIONS TAKEN

- Noise assessment of machines have been carried out with additional assessments on other machines to be conducted.
- During transits of speeds 50mph and above, any person travelling in the operator's seat where the noise is higher (i.e. not the driver) is able to wear hearing defence.
- Ongoing door seal inspections during day maintenance as per TB245.
- Engineering solution to move the hoses away so they are not in contact with the cab body and assess whether fitting noise abatement material in the area of the drive motors in the rear cab will be effective.
- Continue to carry out noise level assessments of other machine areas, identify sources of increased noise and develop possible solutions to keep noise levels as low as reasonably practicable.

# Confidential reporting: A year in the bus industry

TfL bus operators joined the scheme in January 2016. What does a year of confidential reports tell us?



Pie chart 1: Main issues of bus reports to CIRAS 2016 (%)

On 4 January 2016, CIRAS began providing its confidential reporting service for health and safety issues to Transport for London bus operators.

In this period running from 4 January to 31 December 2016, CIRAS received a total of 72 contacts from employees in the bus sector. Of these 72 contacts, 45 became CIRAS reports and 27 were categorised as redirects.

Redirects are reports where CIRAS cannot guarantee the confidentiality of the person making the report, or may be a real-time event – for example, where someone reports someone else who may be under the influence of alcohol or drugs.

The following summary provides an insight into the nature of the reports that were processed as confidential.

It should be noted that there are around 24,000 bus drivers in London. In percentage terms, the sample population is relatively small in comparison to the overall population. However, each report represents the opportunity to potentially prevent an incident. The issues reported are represented as percentages in pie chart 1.

The two most reported categories were fatigue and bus maintenance, each with a 24% share of the total (11 reports in each category).

## What risks did our reporters perceive?

The risk of having a collision whilst fatigued has been

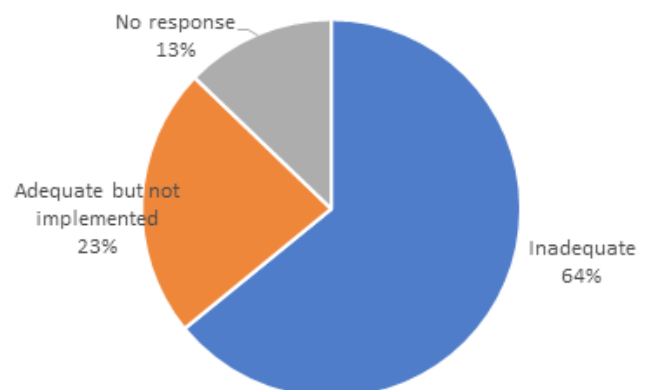
highlighted by reports in this subject area. This risk is potentially increased through long hours associated with particular shift patterns and breaks perceived as inadequate.

In this connection, some drivers felt that the condition of the seats could exacerbate the problem, as well as potentially contribute to long-term health problems.

In terms of the maintenance of buses, some reporters did not feel long standing defects were being effectively addressed, resulting in a lack of confidence in the bus they were driving and in the reporting process in general.

It is also worth noting that some drivers specifically reported the pressure they were under whilst driving as a safety risk, which could lead them to an increase in feeling stressed out, lower levels of concentration, and an increase in risk taking behaviour to meet tight scheduling demands.

The 45 reports may be indicative of wider trends, but caution must be applied in extrapolating too much from a relatively small sample.



Pie chart 2: Outcome from reporting internally before reporting to CIRAS

### Internal reporting before CIRAS

We are interested in why people use CIRAS. Looking at the information we have collected from the 45 reports we note that 91% of reporters have used their internal channels first.

The reporters' perceptions of the internal response in these cases is shown in pie chart 2.

In 64% of cases, the response was perceived as 'inadequate' and failed to address the reporter's expectations. In 23% of cases, the response was perceived as 'adequate but not implemented'.

In other words, the response seemed reasonable to the reporter, but nothing had changed in practice. In 13% of cases, no response had been received in relation to the health or safety concern raised.

We always encourage staff to use internal reporting channels but in situations where they feel they are unable to do so, or have done so already, CIRAS provides an alternative channel and companies still get to hear about the safety concern and respond.

### Human factors activities: Fatigue roadshow events

Fatigue was one of the issues most often raised by bus drivers. It became apparent that this was also of concern to those responsible for safety within the bus companies.

The rail industry members have also been tackling the issue of fatigue for many years and CIRAS continues to receive reports from the rail industry, mainly from the supply chain. Since the summer, CIRAS has worked with bus companies to share solutions that



have previously been implemented in the rail industry.

Chris Langer, Scheme Intelligence Manager at CIRAS, and Monica Monti, HSQE Manager at Abellio London & Surrey, worked together to create and deliver a series of fatigue management roadshows for bus drivers at six Abellio depots.

When bus drivers were booking on, they were asked if they would like to see a short video presentation called 'fatigue management for shift workers'.

The fatigue video covers what fatigue is, the risks of driving when fatigued, and how to manage it. The emphasis is on the responsibility both employers and employees share for managing fatigue. The content also covers the influence of sleep, food, diet, lifestyle and the strategic use of napping.

There have also been two drop-in sessions for Go-Ahead London organised by the CIRAS membership team. One was based on the fatigue video and the second was around improving safety reporting. This second event was in conjunction with their inter-garage annual risk

competition aimed at increasing close call reporting, and raising awareness around health and safety issues.

### Continuous engagement with the bus community for 2017

During the last year, some significant safety risks have been addressed by bus operators.

The 45 reports taken by CIRAS have often contained significant safety risks, enabling the operators to make safety improvements. They also provided an important source of information on the local safety and reporting culture.

Where significant issues, such as fatigue, have been highlighted by the reporting process, CIRAS has engaged proactively with bus operators to further reduce the risk – for example, by holding workshops and creating video content.

In the bus community, the scheme is still in its infancy, but the results to date suggest that it could have an even greater impact on bus safety with further support and endorsement.

This work will continue throughout 2017.

## MEMBERSHIP

# Out and about with the CIRAS membership team

A summary of events and activities by the CIRAS stakeholder managers

## Getting started...

The team met 70 CIRAS new reps at our 2016 Reps' Masterclasses in London, Manchester, Reading and Derby. We ask members to nominate a rep, and provide them with training and support. These events also enable reps to meet and share learning. Our February/ March events were in Glasgow, London, York, Cambridge, Southampton and Gloucester.

## ... and talking 'fatigue'

At the same time we ran sessions to share intelligence from members on issues surrounding fatigue and its management. Over 100 attendees explored topics such as challenges in assessing fatigue, tackling lifestyle factors, and ensuring compliance with fatigue measures. This popular series ran again in February and March.

## Improving culture

Amanda O'Donoghue, Stakeholder Manager (South), was invited to Go-Ahead London's Merton and Stockwell garages in September and October to talk about how confidential reporting can increase safety and improve workplace culture.

Over 200 staff including bus drivers, engineers and management shared thoughts on shift patterns, managing fatigue and how issues like childcare and night shifts impact on daily living.

## Travelling safely at Christmas

Amanda met Great Western Railway's health and safety team in Plymouth in November to raise awareness of CIRAS. In December, Great Western Railway worked with the British Transport Police to ensure staff and passengers travel safely at a time



Amanda talking fatigue at Go-Ahead London

when festive celebrations create challenges and leave some people vulnerable.

The team discussed how confidential reporting can bring potential threats and concerns to light.

## Apprentices get on board early

Katie Healy, Stakeholder Manager (Central England and Wales), visited Network Rail's Westwood Training Centre near Coventry in November to introduce a group of 100 first year NR apprentices to confidential safety reporting.

Raising awareness early on gives them the knowledge and confidence to report safety concerns throughout their careers.

## Feedback from the Unite bus community

In December, Katie updated the Unite Safety Reps' Forum for Buses in London on how the London bus community has embraced CIRAS since January 2016. In an interactive

session, participants gave Katie valuable feedback, highlighting areas where we can do more and better engage with members.

## Grand Central Annual Safety Conference

In York last November, Sue Gray, Stakeholder Manager (North), briefed over 50 Grand Central Railways staff on how confidential safety reporting offers additional choice for raising safety concerns.

A key message was taking personal responsibility for speaking up to prevent incidents. Sue shared tips on how to make reports, and our inspiring video by Pam Warren, survivor of the Ladbroke Grove tragedy in 1999.

## Engaging with contractors

In November, Sue also spent time in Hull meeting CIRAS members from the Network Rail contractors' community. Amongst other things, engineering firm C Spencer Ltd provided some great ideas for improving the newsletter, and Colt

Construction explored the possibility of running a stand down safety briefing for project staff in 2017.

### Reporting analysts meet our members

In January, CIRAS reporting analysts Daniela Allison and Rachael Addison accompanied Amanda to Go-Ahead London's New Cross Gate bus depot for another session on managing fatigue. Our analysts are the people whom transport workers talk to when they get in touch with CIRAS - so it was a great opportunity for them to get out of the office, visit a member site, meet bus staff face to face and answer any questions around the reporting process.

Around 60 drivers and engineers came along to see our animated fatigue video and talk about the role of diet, exercise, sleep and mindfulness in helping them manage their fatigue.

### Engaging with TfL surface transport

The team has been out meeting with the newest members of the TfL family to sign up to CIRAS – TfL's surface transport operations. Amanda met with staff at TfL bus operations, at Canada Water and Palestra near Waterloo, and Kerry and Katie



*Katie, Daniela and Hazel at NR Signalling Control Centre, Rugby*

have also attended bus operations meetings during January. The team talked about the work CIRAS has been doing with our bus members to embed CIRAS alongside their existing safety systems, and encourage a positive safety culture. Discussions also covered key themes of bus reports so far, such as fatigue, shift patterns and equipment.

### Hearing from a freight operator

Sue visited one of our freight members, Direct Rail Services, in Carlisle in January. They discussed some of the particular issues which face freight operating companies and the diverse nature of the work. Many

railheads are in remote places, and much work is undertaken at night or over weekends, often in challenging conditions. This insight is really valuable to CIRAS, as it helps us think about ways we can better meet the needs of our freight members.

### Learning about signalling from Network Rail

Katie was also accompanied by reporting analysts Daniela and Hazel Craig, on a visit to Network Rail's Signalling Control Centre (SCC) and Rail Operating Centre (ROC) in Rugby in February. The team saw how passage of trains is controlled north of Watford and up to Rugeley. They spoke to NR staff responsible for monitoring long distance trains, and the impact late running trains have on other services.

This kind of learning visit helps CIRAS staff build a better understanding of the challenges faced by those who use the scheme e.g. how decisions are made as to which trains to hold and which to let go forward, with as little impact on passengers and other operators as possible. The insight gained helps us put valuable context around the reports we receive.

### Thank you

We would like to thank all those reps who completed our recent survey, your time and your feedback is appreciated. We had a total of 337 responses, totalling about 28% of our reps. We will review all your responses and comments and use this to inform our work going forward.



*Sue with DRS's Colin Rennison in their Carlisle depot*

## NETWORK RAIL

# Temporary Speed Restriction (TSR) signage removed

Staff cancelling Automatic Warning System (AWS) indicator as speed restriction was lifted but TSR remained in place

## THE CONCERN...

Concerns were raised that Temporary Speed Restriction (TSR) signage was still in place at two locations on the Glasgow to Gourock line, despite the TSRs ending some time ago. The TSR at Langbank was in place, reducing the linespeed from 75mph to 20mph.

It was reported that a spate board was erected to inform drivers that the restriction no longer applies; however, the signage remained in place.

A TSR was also in place at Paisley Gilmour Street, and all signage remained in place despite the TSR having long expired.

There was no spate board at this location, and the Automatic Warning System (AWS) magnet was still in place.

It became common practice for staff to cancel the AWS indicator at this location as they knew it was not applicable. There were concerns that staff could become complacent towards ignoring TSR signage.



© Kevin Richards

The reporter asked if Network Rail could:

- Remove the TSR signage at the above locations
- Clarify if there is a system in place for monitoring the removal of TSR signage, and when they should be removed by

## THE RESPONSE...

Network Rail is grateful that these concerns have been brought to their attention.

The TSR boards at both Langbank and Paisley Gilmour Street described here were removed shortly after the report was received.

There is a system in place for the removal of TSR boards. That system dictates that the department responsible for the works to raise the speed to line speed is responsible for the removal of the necessary boarding after publication expires.

## ACTIONS TAKEN

- Follow up with the department responsible for its removal has been undertaken.



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# Do you have any **concerns** about safety?

Have you tried internal reporting channels, or don't feel that you can?

If so, please provide your contact details in the space below. Any information you provide will be treated as confidential.

We ask you to provide your name and contact details so that a CIRAS reporting analyst can get in touch to discuss your report. Once your report is processed, your report form will be destroyed.

CIRAS will never reveal your personal information to anyone!

Name:

Home phone no:

Mobile phone no:

Convenient time to call:

Job title:

Company:

Home address:

## Optional

If you would like to briefly describe your concern, please do so in the space provided below:

.....

.....

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*There are other ways of contacting us if you prefer. You can call us, text us, or fill out a form online. All our details are at the bottom of the page.*

## What happens next?

- A member of the CIRAS team will get in touch and discuss your health and safety concerns.
- A written report will be prepared on your behalf.
- We will make sure the report does not contain ANY information that can identify YOU.
- We then send the report to the relevant company for a response.
- Once we receive the company response we will then provide you with a copy.

Fill out the form, cut along the dotted line and seal.



CONFIDENTIAL

POSTAGE  
PAID

# FREEPOST CIRAS

Fold along the dotted line and seal edges



# CONFIDENTIAL REPORTING

CIRAS is an independent confidential reporting system that listens to all health and safety concerns.

We protect confidentiality by removing all identifying information from the report.

We help facilitate a response to your concerns.

Freepost CIRAS  
Text 07507 285887  
www.ciras.org.uk

# 0800 4 101 101