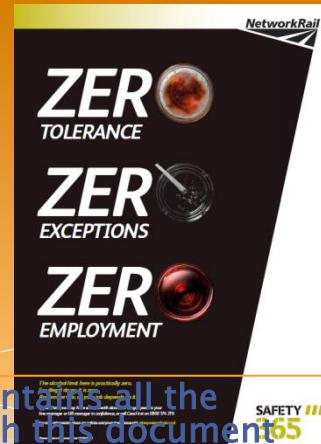


# Wessex Route



The new foot bridge at Chandlers Ford.

# Welcome



Welcome to your Health, Safety and Environment Cascade for Period 9 2016. This contains all the documents and safety briefs you need to update your teams this period. Flick through this document and share with your team, print off the pages that you want to discuss and pin them up in mess rooms for staff to look at throughout the month.

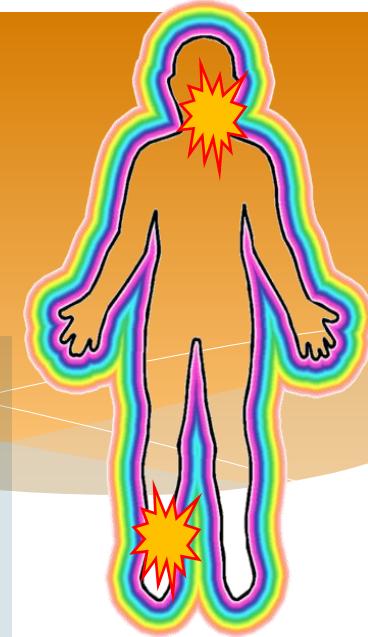
In this cascade:

- \* **Workforce Safety**
- \* Layer up to keep warm
- \* **Golden Hour Aid Memoir**
- \* **Handbook 8 Reminder**
- \* **Vehicle Tracking System**
- \* **Working at Height**
- \* **Close Calls**
- \* **Happy Holidays**
- \* **Safety Hour**
- \* **Safety Bulletins**
- \* **Investigations & Fair Culture Panel**
- \* **Safety Conversations & PGSlS**

Work on the new foot bridge at Chandlers Ford. Another foot crossing bites the dust.



# Workforce Safety



## 2 Lost Time injuries:

### OUTER

In below freezing temperatures near Salisbury Tunnel Junction, the injured person from Salisbury P/Way was standing on the ballast tightening a fish plate bolt with a spanner. Underfoot conditions were icy. As he applied pressure the spanner slipped off the nut, unbalanced him and which caused him to fall backwards. He was caught by a colleague that stopped him from falling to the ground, but in the process he jarred his neck leaving it stiff and sore.

*Discussion point: Icy conditions, keeping warm, sufficient lighting on site.*

### Works Delivery

The driver of a Network Rail vehicle was driving to an access point during the hours of darkness when he saw a tree in front and swerved to avoid it. He didn't realise that there was a metal post on the other side of the road. The van struck the post slightly and as he was pushing the brake he twisted his ankle.

*Discussion point: Dark unlit road sand limited visibility , keep speed as low as possible.*

# Workforce Safety

## 5 Non Lost Time Injuries

### INNER

Whilst setting up a Weld, as he was knocking a wedge into the holder for the weld which was positioned under the rail, one of the wedges flicked up and struck him in the face on the right cheek causing a cut and a lump.

*Awaiting further information.*

### WORKS DELIVERY

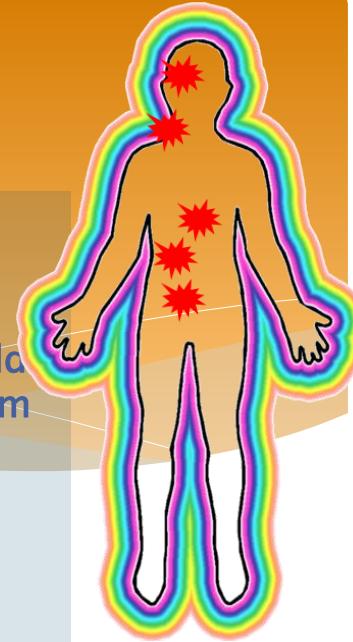
Two contractors were struck by debris from a poorly placed speed board which was situated in the 6ft when it was struck by a passing train –Two minor injuries; one injured in neck, one in the stomach.

*Two manual handling related in cold conditions....*

An Operative from WDU Outer based at Eastleigh strained his back lifting a 25kg bag of ballast out of a 1 Tonne bag, Golden Hour Implemented.

Another member of staff felt a twinge in his back whilst bending over to lift some plant from the stores at Eastleigh Depot, he aborted the lift minimising the injury. It should be noted that IP bent down as his manual handling training had shown him but has a pre-existing back condition.

*If you have a history of back problems; think twice before you dive straight in to a manual handling lift.*



# Top Tips for keeping warm

## Simples

- \* Wear layers of clothes so you can strip off if you get hot; 3 layers are recommended
  - \* a moisture wicking base layer,
  - \* an insulating mid layer and
  - \* external waterproof/windproof layer.
- \* If you sweat you will get colder because you are wet.
- \* If your torso gets cold your hands will suffer; as blood will be diverted from the extremities to the important organs.
- \* Keep moving to create and maintain body heat
- \* Sock up – keep your feet warm.
- \* Carry a spare gloves –keep your hands dry.
- \* Remember you will be slower in the cold so add in more time for activities.
- \* Drink more water – stay hydrated
- \* Eat fatty foods; the body burns more calories keeping warm.

# Weather Resistant and Thermal PPE

## Layer up to keep warm.

Flame Retardant Leggings

NR002/NR13/700



- Flame retardant underlayer
- Moisture wicking material
- Elasticated cuffs

Bodyguard Workwear Fleece Balaclava

NRH062/NR13/8CLAVA



• One size fits all

### Thermal Wear



Thermal Long Sleeved Undershirt

NR005/NR13/100

- Long sleeved vest
- Crew neck
- Ribbed cuffs



Thermal Short Sleeved Undershirt

NR006/NR13/080

- Short sleeved vest
- Crew neck
- Ribbed cuffs

SXL



Thermal Shorts

NR007/NR13

- Elasticated waist
- Vented fly



Thermal Leggings

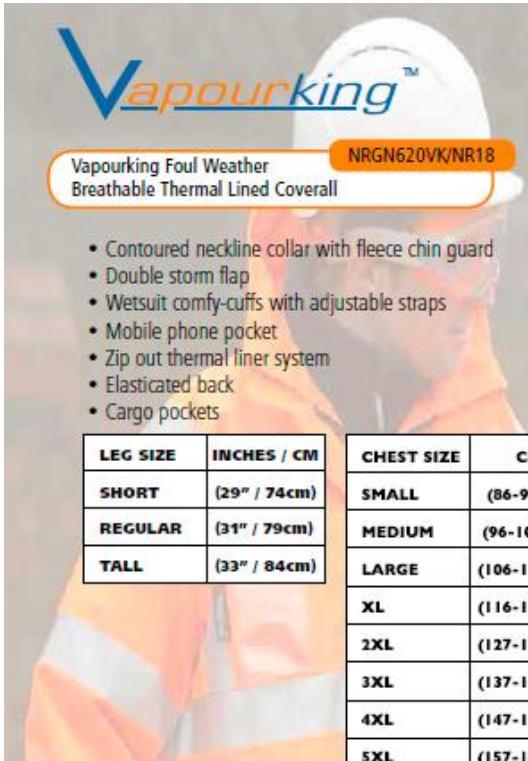
NR004/NR13/300

- Elasticated waist
- Ribbed ankles
- Vented fly

- Flame retardant underlayer
- Moisture wicking material
- Elasticated cuffs

# Weather Resistant and Thermal PPE

## Layer up to keep warm



# Workforce Safety

## Key

Slips, Trips & Falls



Manual Handling



Road Vehicle



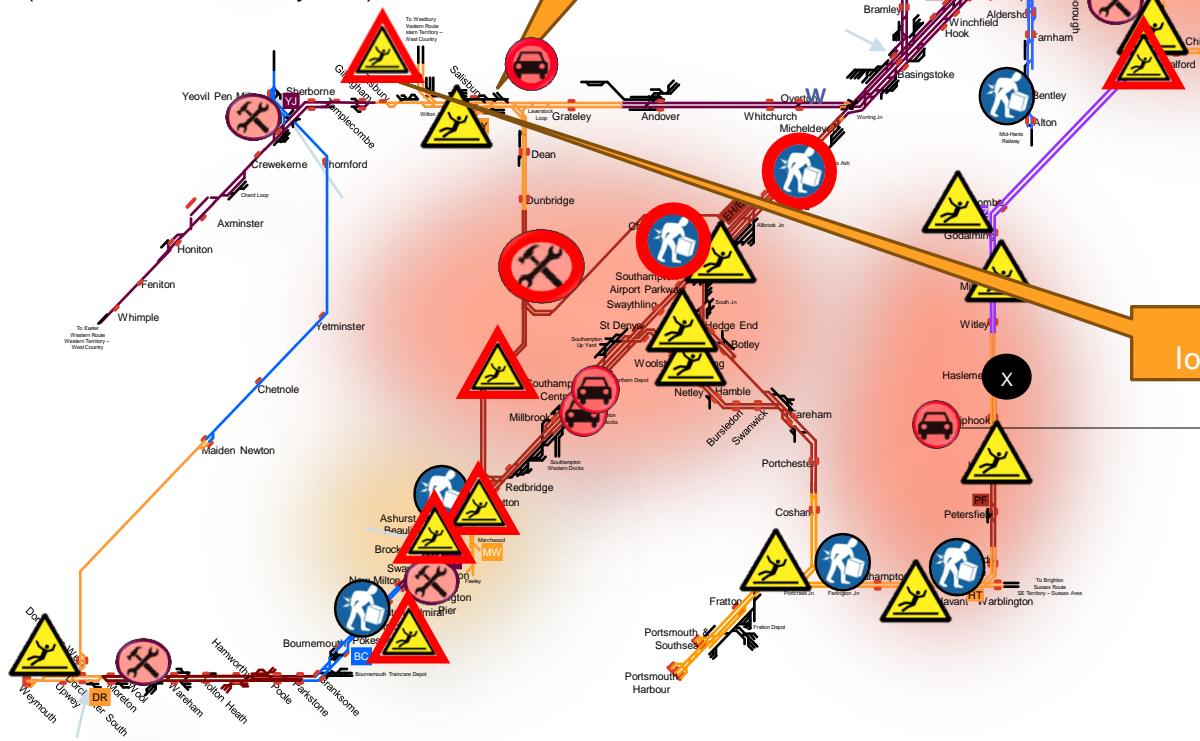
Small Plant & Equipment



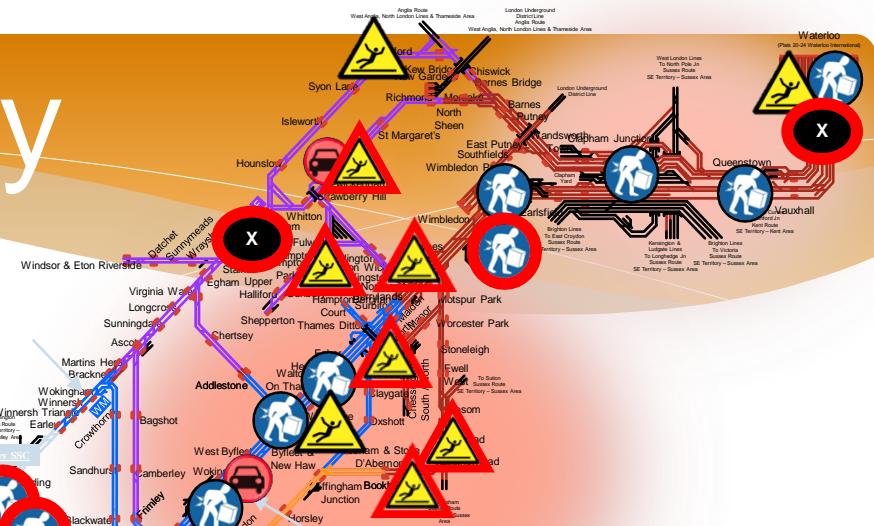
Other



2016/17 (Bold Red Outline on Symbol)



Significant  
Accidents  
from April 2015  
to date on the  
Route



## Aide Memoir

**REMINDER to assist with accident and Near Miss response immediately after.**

Care

- Who – Establish injured person details i.e. name, function etc
- Injury - Assess the severity of the injury i.e. body part affected, restrictions?
- First Aid - Consider the arrangements required, who will administer? Ambulance required?
- Welfare – Can the injured person continue with the work, if not where will they be taken?
- Travelling home – Are they fit to travel alone, if not who will accompany them?
- Hospital – Do they need to attend hospital, who will accompany them?
- Other affected employees – is duty of care required for anyone else? Did anyone see what happened, what did they see, has this affected them i.e. shock?

Site

- Site Safety – Undertake immediate actions to make the site safe i.e. protect the line
- Evidence – Collect any evidence, preserve any perishable items and take photographs if possible,
- Hazard – Remove the hazard to prevent re-occurrence, if possible or stop work
- Tools / equipment – Consider what will happen to tools, equipment, PPE if going off site
- Witness – Did anyone see what happened? Obtain witness statements.

Report

- ID – Clearly identify who is the injured person, On-site Lead, Responsible Manager and Line Manager
- Event details – Gather as much information into the event as possible i.e. establish what happened, what was happening just before the accident, what are the potential causes?
- Actions – Report all actions undertaken (immediate / follow up), what further actions required and who will be undertaking these?
- Friends / Family – Establish if the injured person needs to inform anyone, who will contact them?
- Emergency services – Establish which emergency services are required and arrangements to be made
- Communications - Clear liaison between all parties to enable appropriate care to be provided and investigation undertaken

# Handbook 8

## IWA, COSS or PC blocking a line

The Signaller in the Box of  
the PROTECTING SIGNAL

### 1.2 Agreeing the arrangements

You must agree all of the following with the signaller.

- The line to be blocked.
- The nature of the work.
- The locations between which the work will take place.
- The amount of time needed to do the work.
- The time after which permission can be given for the line blockage to start.
- Which signals will be kept at danger or block markers at which the route will be closed to protect the activity, including those in both directions on a single or bi-directional line.
- Any additional protection needed.
- If the work will take place beyond points that need to be used for train movements.
- The arrangements if single line working is taking place.
- The arrangements to apply at each level crossing.

# Workforce Safety

## COSS REMINDER

### 3 Granting the line blockage

The signaller will not grant the line blockage to you until the portion of line concerned is clear of all trains, or when you and the signaller can be sure that all trains have passed beyond your site of work.

When you are both sure that the details on your line blockage form are correct and all the arrangements have been carried out, the signaller will give you an authority number.

You must record the authority number on your RT3181 form. You may now consider the line blockage to be granted.

With the exception of  
Patrollers or continuously  
moving worksites

Document comes into force on 05/12/2015  
Supersedes GERT8000-HB8 Iss 4 on 05/12/2015

### 4 During the line blockage

#### 4.1 Protection at the site of work

When you have been given the authority number, you must place a red flag or red light on the approach to the site of work if:

- the work will affect the safety of any approaching train, or
- a group is working.

You must make sure that the red flag or red light is placed in the four-foot where it will be clearly visible to the driver of a train approaching on that line.

You must do this in both directions if:

- you are working on a single or bi-directional line
- single line working is in operation on the line concerned.

# Workforce Safety

## Focus on – Driving

### Outer DU trials the Vehicle Tracking System (VTS)

- *What are the benefits?*



- Live 'in cab' visual & audio speed warnings
- Improved driver behaviour
- Electronic journey purpose reporting
- Reduction in fatalities and injuries due to RTA's
- Reduction in lost days due to RTA's
- Reduction in NR fleet running costs (fuel, repairs, fines, insurance claims)

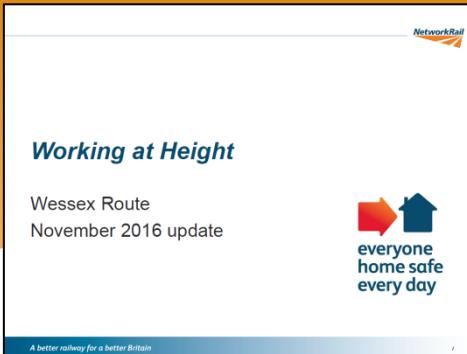
VTS is being introduced to improve the safety of our staff by helping them to drive within the speed limit by providing a system that enables drivers to moderate their speed in real time and reduce road risk.



- The VTS is intelligent and provides the national speed limit warnings for the current location to assist the driver to comply with the legal speed limit
- An in cab visual & audio alert warning system, so that the first person to benefit from the warning is the driver
- Enables the driver to modify their driving behaviour preventing any Line Manager notification of speeding
- All drivers will have access to an individual driver portal to see their own driver data, Line managers will not have access to this portal
- The system is designed to help staff comply with the speed limit and our life saving rule
- Managers CANNOT just 'login in to see where their staff are'

# Workforce Safety

## Working at Height



Updated Working At Height presentation primarily for S&T is ready for briefing.

To be read in conjunction with NR/L3/MTC/RCS0216/GH04 for all other functions.



- \* *SECTION A:- All Risks Working at Height*
- \* *SECTION B:- WORK ON ROOFS*
- \* *SECTION C:- PORTABLE LADDERS*
- \* *SECTION D:- FIXED LADDERS (IE SIGNAL GANTRY/POSTS AND BUILDINGS)*
- \* *SECTION E:- PORTABLE AND TROLLEY MOUNTED SCAFFOLD*
- \* *SECTION F:- MOBILE ELEVATED WORK PLATFORM BOOM OR SCISSOR*



# Close Calls

## Call it in to prevent future accidents

Seen something that doesn't look or feel right? Call it in

By calling in an incident that has the potential to cause damage or injury, you can help prevent it occurring in the future

This period 229 **close calls** have been reported on the Route, 113 have already been closed, 116 remain open.

Can you make the situation safe?

Remember, if it is safe to do so, deal with the close call and then report it. For example:

Icy steps and walkways

Cables in walkways

Faulty electric wires and equipment

Misted up windscreens



# Close Calls

## Top tips for a slicker system...

### \* *The Reporter*

- 1. give a clear and concise account of the close call and an indication to whom it should be assigned.*
- 2. If at all possible fix the hazard in real time and report it as a closed cc, with no further action necessary.*
- 3. Will not get a response unless he/she requests it at the time of reporting.*

### \* *The Responsible Manager*

- 1. on receipt of a cc, review and if assigned incorrectly , find out to whom it should be re-assigned and then re-assign with n 7 days*
- 2. provide regular feedback to the reporter if requested.*

# Happy Holidays? Not for everyone

**ZER**  
TOLERANCE



NetworkRail

**ZER**  
EXCEPTIONS



**ZER**  
EMPLOYMENT



*The alcohol limit here is practically zero.*

*For illegal drugs, it is zero.*

*Remember this, as your job depends on it.*

*If you think you may have an issue with alcohol or drugs, speak to your line manager or HR manager in confidence, or call CareFirst on 0800 174 319.*

*For more information about our policies and procedures please visit [safety.networkrail.co.uk](http://safety.networkrail.co.uk)*

Please remove this poster after 09/05/2011

## Drugs and Alcohol

### The limits



Never work or drive while under the influence of drugs or alcohol.

Alcohol limits within Network Rail are as set by the Railway Group Standard GE/RT8070;

**29 milligrams of alcohol per 100ml of blood**

**13 micrograms of alcohol per 100ml of breath**

**39 milligrams of alcohol per 100ml of urine**



everyone fit  
for the future



# Happy Holidays? Not for everyone

Validium provides  
support 24/7 over the  
Winter Holidays

vali

-  Support for emotional concerns
-  Guidance about a healthy lifestyle
-  Information on managing your money
-  Support with childcare/elder care issues
-  Help with legal matters
-  Manager Support Helpline

Remember you can call Validium for support on a variety of issues  
– or go online at [validium.com](http://validium.com) to check out vClub



**0800 3 58 48 58**

Outside UK: +44 141 271 7179

For online support join vClub at [validium.com](http://validium.com)

Username: NetworkRail

Password: onlinesupport

 **validium**  
INCREASING WORKFORCE VALUE

## Two key messages this Christmas



## Domestic violence

[validium.com](http://validium.com)

If you are experiencing or are affected by domestic violence you should contact the Police, your GP, local networks, national charities or your EAP.

### Validium can:

- Provide confidential, non-judgemental support
- Explore options with you for practical and local support
- Discuss measures to prioritise your safety
- Give you guidance on how to support someone you know



Remember you can call Validium confidentially for support on a variety of issues – or go online at [validium.com](http://validium.com) to check out vClub

**0800 3 58 48 58**

(Outside UK: +44 141 271 7179)

**0330 332 9980**

(Free from mobiles with contract minutes)

For online support join vClub at [validium.com](http://validium.com)

Username: NetworkRail

Password: onlinesupport

24/7 Confidential Service

 **validium**  
INCREASING WORKFORCE VALUE



# Workforce Safety

## Safety Bulletin

*A serious incident has taken place*



### Near miss with advanced lookout near Surbiton

**Issued to:** All Network Rail line managers, safety professionals and RISQS registered contractors

**Ref:** NRB 16/21

**Date of issue:** 12/12/2016

**Location:** Surbiton

**Contact:** [Steven Edwards](#), Workforce Health and Safety Advisor



### Overview

A three man track patrolling team consisting of a Network Rail COSS/patroller and contract site and advanced lookouts were conducting a track patrol.

The COSS proceeded to inspect the Up Fast line and observe the Up Slow, accompanied by the site lookout. As the COSS and site lookout continued the patrol the advanced lookout walked, as he had been instructed, in the wideway in-between the Up Slow and Up Fast lines.

The advanced lookout, who was approximately 200 yards ahead of the COSS and the site lookout reached the end of the wideway walking path and continued to walk straight ahead into a standard ten foot, which narrowed gradually into a six foot.

At this point the advanced lookout was not in a position of safety and was at risk of being struck by trains approaching on either the Up Fast or Up Slow.

A passenger train approached on the Up Fast and the advanced lookout moved his body toward the Up Slow line as it passed. He could not move into the Up Slow line because he had observed another train approaching on the Up Slow line.

The trains passed narrowly either side of the advanced lookout, but not at the exact same time.

## Safety Bulletin

### Discussion Points

While the investigation is underway please discuss the following with your team:

- How do you maintain a safe system of work when using an advanced or distant lookout - especially where a moving worksite is in place?
- How do you ensure that all members of your party have listened, taken in and understood the COSS brief?
- How can you keep checking whether a team mate has mistakenly strayed out of a position of safety, particularly when you are focused on your work?
- What can be done in your areas to make staff aware that they have reached the end of a safe walking route?
- How can we better feed back to our planners whether our Safe System of Work Packs have helped to keep us safe? What else should we feedback to them?

Copies of Safety Bulletins are available on [Safety Central](#)

Part of our group  
of Safety Bulletins



# Workforce Safety

## Safety Bulletin

Wessex Route  
Lessons Learnt Circular.



### IMMD OUTER

Title: DC Electrical Flash-over: Apprentice Arc Eye.

#### Incident.

On 9<sup>th</sup> November 2016 at 0938 hrs on the Down Brighton at 36m 32ch (Havant) an NR Apprentice sustained a minor arc eye injury during an electrical flash-over event, when the metal prong of an approved and insulated fork came into contact with both a running rail and a live 750v d.c. conductor rail simultaneously.

The team were tasked with measured shovel packing. Whilst replenishing ballast in bays to fill empty beds between a running rail and live conductor rail one of the Apprentices had moved outside of the protection area provided by a conductor rail shield and inadvertently put the fork he was using between the two rails causing contact and the flash-over.

The injured Person was one of two Apprentices on attachment from the IP High Output Track Renewals to a Permanent Way Section. He was sent over adjacent to his colleague when the flash-over occurred. He suffered temporary blindness for 10 minutes, visited hospital and was discharged without further concern.

#### Reference Documentation

RCS No: NR/L3/MTC/RCS0216/GA20  
Working Adjacent to DC Electrified Rails Risk Level 1 - 3  
NR/L3/MTC/SE0089 New Starter mentoring (Safety Passport Scheme).



#### Lessons Learnt

1. Always have sufficient conductor rail shields on site and placed over the conductor rail to cover the work area.
2. Check everyone understands the limits of this work area.
3. All 'inexperienced' members of staff on a NETOPS worksite are subject to the New Starters Mentoring (Safety Passport scheme).
4. The Team Leader (this may be the COSS) shall appoint an experienced person as a Minder/ Buddy to accompany every passport holder at all times whilst lineside.

IMMD Outer. Electrical Flashover 09.11.16.  
Displayed on Notice Boards for 12 weeks from issue.  
Contact: Outer IMMD [dean.moss@networkrail.co.uk](mailto:dean.moss@networkrail.co.uk)

Issue Date: 5/12/16

### SOUTH EAST, WESSEX AND HS1 VEHICLE INFORMATION NOTICE

#### STATUS:

#### IMPORTANT

#### SUBJECT:

#### DRIVER DAILY VEHICLE CHECK

This is to remind drivers of vehicles fitted with twin rear wheels of the importance of checking the inner wheel and tyre which may not always be visible from the side of the vehicle.



#### When was this tyre last checked?

A tyre in this condition is not only illegal it is also placing the driver, passengers and other road users in imminent danger.

With the NR tyre replacement policy of 3mm this situation should never arise.

Drivers should check that :-

- Tyre tread depth is satisfactory – NR policy to replace tyres at 3mm whilst the legal minimum tread depth is 1.6mm.
- There is no obvious damage to the wheel and/or tyre that may cause premature failure..
- That the tyres are correctly inflated.
- That no objects have become wedged between the tyres of a twin wheel vehicle
- That the wheels / wheels nuts are secure.

If unsure or if defects are discovered contact BT Fleet on 0845 600 6767

# Level Crossing Safety

## Safety Bulletin

### OPERATIONS MANUAL

Form: 5-18A  
Page: 1 of 1

Issue: 1

Date: 03 March 2012

TEMPLATE FOR BRIEFING OF SERIOUS OPERATIONAL INCIDENTS

### Immediately Transferable Lessons from Level Crossing Near Miss

Information for Signallers and Front Line Operational Staff

Location: Thorney Marsh Lane UWC (Fitted with POGO) on the single line between Castle Cary and Yeovil

Controlled by: Westbury PSB

Date: 26<sup>th</sup> November 2016 Time: 07:25



The signaller at Westbury allowed the use of the crossing with a train approaching. A near miss occurred and the user, driver and signaller were all unhurt though shaken.

There had been a number of conversations with the farmer that morning, with the first requested use of the crossing at 0546hrs. The crossing is used regularly (it had been used 51 times in November) and signallers and crossing users are used to working with one another.

Although the picture above is for a train travelling in the opposite direction to that involved in the incident, it can be seen that protecting signals and train describer berths straddle the level crossing. It is possible that the train describer information was misinterpreted by the signaller when identifying the train's position.

A review of voice communications identified familiarity and poor adherence to protocols.

#### Transferable lessons:

- Undertake a thorough check of train positioning before allowing users to cross, using track section indications rather than train describer steps
- Make sure you know whether the movement is for "large, Low, slow moving vehicles or Animals", checking this every time
- Use structured level crossing communication protocols at ALL times to guard against familiarity
- Signallers must lead the conversation
- Double check that all trains have passed the crossing before authorising it to be used

Date Produced: 30<sup>th</sup> November 2016

Reference Number: TV Nov16/01 Post For: 12 Weeks

# Operational Safety

South East Route, Network Operations



Date issued: 24/11/2016

Incident Alert: LH/IM08

## SAFETY ALERT

Consequences of NOT CHECKING INDICATIONS with ROUTE CARDS

### Description of Incident

At 02:07 on Thursday 24<sup>th</sup> November the Signaller at Hastings set a route for a railhead treatment train (RHTT) from Ore sidings towards platform 1 at Ore station. This movement required EDL24 points to be in the reverse position in order to clear the Appropriate shunt signal out of the sidings (EDL26) This shunt signal failed to change to a proceed aspect so the Signaller used a route card in order to pass EDL26 signal at danger. When checking the route card which required EDL24 points to be in the reverse position for the movement, the Signaller failed to notice that there was no detection on EDL24 points. The Signaller assumed that because the lever controlling EDL24 points had been pulled out of the frame that the points were in the reverse position and detected. On failing to correctly identify the indication on EDL24 points, the Signaller authorised the RHTT to proceed past EDL26 shunt signal at danger. The RHTT proceeded past the signal and onto the catch points run off, VERY nearly derailing the train into a Deep waterway Culvert.



# Safety Bulletin

South East Route, Network Operations



### Contributing factors to the incident

- EDL24 points failed to obtain detection when set to the reverse position.
- The Signaller did not adhere fully to the requirements of the route card.
- The Signaller did not notice that there was no indication on EDL24 points
- Although the lever was pulled for EDL24 points they did not move leaving them in the position to derail the train

### Actions to prevent similar incidents

#### Signallers:

- **ALWAYS** check the indications of points and signals when setting a route.
- **ALWAYS** follow Rule Book module **TS1 unit 3.6** when setting routes within your area of control
- **ALWAYS** follow Rule Book module S5 unit 2.2 and 2.2 when authorising a signal to be passed at danger.
- **NEVER** assume that you have the required detection of signalling equipment, always make a visual check before you authorise a signal to be passed at danger.
- **NEVER** use a lever position as a signalling indication or detection.

**YOU MUST use Route cards and check all signalling indications are correct.**



# Published Investigations

Area	Date of incident	Level	Description	Lead Investigator	DCP	Published	Actions	Recs
Ops Delivery	06/03/16	2	PICOP authorised 6Y20 through a worksite in error at Bramley	Bernard Toska	Andrew Patten	14/11/16	4x Closed 1x Open	None
IP	07/06/16	2	Worting Junction Irregular Working Event during Strapping Duties	Roland Kettle	IP event	14/11/16	3x Closed 16 x Open	None
Ops Delivery	31/03/16	2	Possession Irregularity : The wrong ES (with Stapmen) were authorised to test and apply scs on an open line.	Geoff Norman	Andrew Patten	30/11/16	2x Closed 6x Open	None
IP	09/10/16	2	Access and Strapping Irregularity WON 28 Item 84	Terry Smith	Bill Cooke	01/12/16	2x Closed 5x Open	None

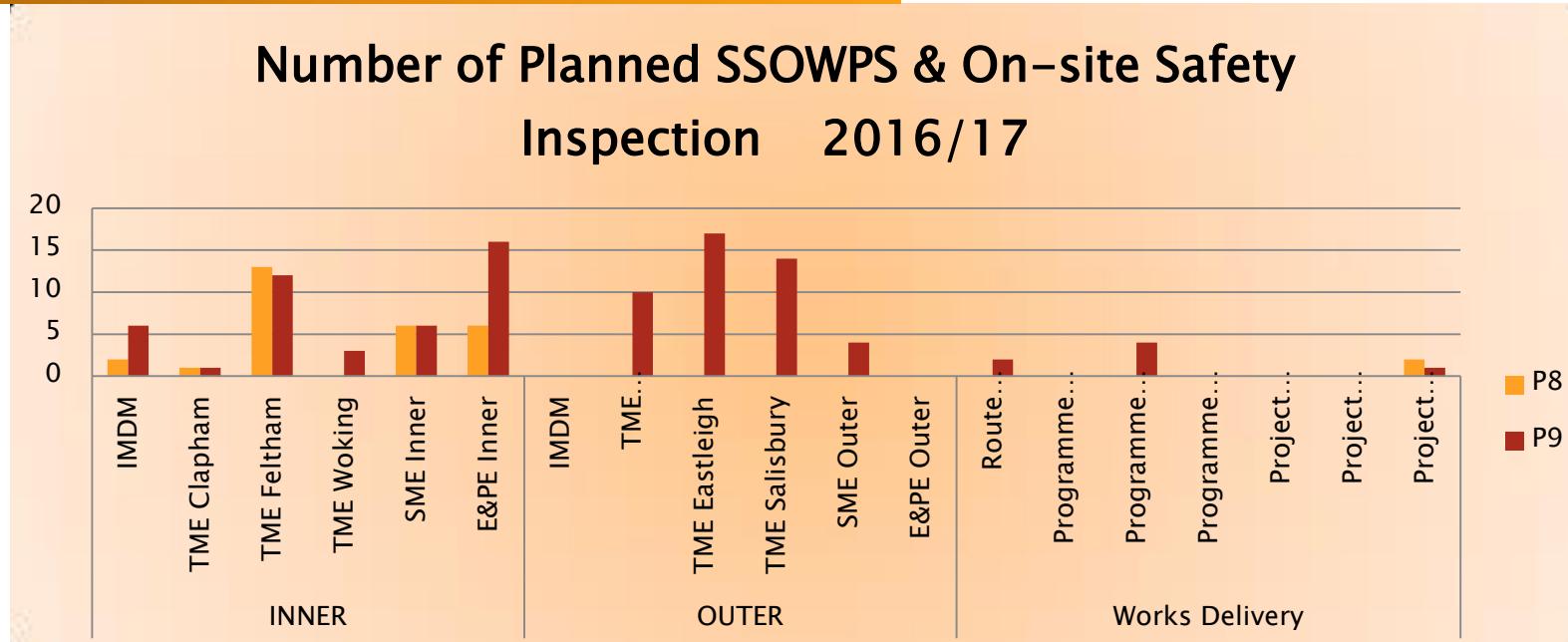


# Fair Culture Panel Review

30.11.16

Event	Immediate Cause	Underlying Cause	L/Investigat or outcome	FCP outcome	FCP comment
P08 1617 28/10/16 EH8901 Run through Baltic siding	Signaller failed to set the route correctly for an un-signalled move taking place with 6J28 departing from a possession	The Signaller failed to identify the requirement to set the route by use of the relevant route card and to get the route checked, this is not felt to be an issue with practices and process, as if the process is followed the incident would not have occurred.	Contravention	Contravention	The Panel agreed with the Lead Investigator.
P08 1617 06/11/16 Rhino Horn attachment Staff Accident	A damaged Strail RRV lifting tool was used causing it to slip out from the Strail panel locking system hole. The lifting attachment was also uncertified.	The crane controller did not ensure that the correct lifting attachment was being used in the right manner. The Lifting attachment being used was bent out of shape and was no longer fit for the work being carried out. The team were working to a short time constraint. Staff were rushing to complete the work required due to time pressures.	Contravention	Contravention	The Panel agreed with the Lead Investigator.
P13 1516 06/03/16 PICOP authorised 6Y20 through a worksite in error	The PICOP authorised 6Y20 to exit as far as the protection, but overlooked that there was a worksite preventing this arrangement.	The possession had been changed on supplement the day before with worksite Bravo added. This resulted in the possession pack been re-issued. The PICOP overlooked the additional worksite when instructing the engineering train to proceed to the PLB protection due to him having managed the same identical possession several times without the additional worksite being added.	Slip / Lapse	Slip / Lapse	The Panel agreed with the Lead Investigator.

# Safety Conversations and PGSI



# The Womble bag returns!

Get one at a place near you  
**SOON**

*300 have been ordered,  
100 for Inner, 100 for Outer  
and 100 for the ROC .*

*Await further instructions on  
how to get yours...*



# Appreciation Section

A thank you to:-

A number of people intervened to prevent suicides this period; from the Inner DU – Charlotte King, Michael Usuanlele and Russell Knot , and from the Telecoms Dept. Richard Burt . Thank you.

We would appreciate your feedback

Tell us how we could improve this cascade or if you would like to see an item next time round, please contact:  
Your Local WHSEA or Tracey Capstick RWHSEA.

If you would like to take part in the Route Safety Hour session please contact your IMDM or equivalent.



**‘Happy worker, Happy customer’ by John Wright - Entry to the Business Briefing photo competition:**