



# Christmas 2016- New Year 2017 Health and Safety Overview

## ***What did we achieve***

- Whilst the majority of the UK over-drunk, over-ate and over-spent, over 24,000 members of railway staff mobilised across the country over the festive season working on around 200 different projects including major upgrades to the rail network.
- £103 million was spent improving the rail infrastructure across the entire IP portfolio.
- Every IP Region and Programme played their part delivering this Christmas including a number of bridge replacements, new platforms and signalling upgrades. We also saw a record breaking number of track renewals, 2418 yards in one shift alone.
- Thankfully the majority of the work went according to plan, however there have been a few notable incidents which led to minor injuries, and close call, all of which had the potential so that the onsite teams may not have got home safe on that day.

# ***105 Health and Safety events logged***

Between 24/12/16 and 02/01/17 there were 105 events reported on the log.

## **People**

### **1 near miss**

There were 10 Slip, Trip & Fall type events

4 Manual Handling type events.

2 staff failed an initial D&A test

2 cases of unauthorised access to the track

5 thefts or attempted theft

## **Plant & Equipment**

There were 7 occasions where plant struck the OLE with 7 cable strikes.

7 points 'Run- Through's

7 hydraulic hose failures

5 other equipment related failures

## **Away from Site**

There were **9 Road Traffic Accidents** – all minor

# Near Miss- Ladbroke Grove 30 Dec

## Incident Detail

At 0933 the driver of 1W19, EF, 0921 London Paddington - Worcester Foregate Street, reported a near miss at Ladbroke Grove with a group of staff. The group, later identified as being Alstom contractors, were stood in the Down Main line cess and were seen only at the last moment by the driver as visibility was down to 40 - 50 metres due to fog. The driver was shaken by the incident and was met at Reading (fit to continue). The Operations Delivery Manager was advised and the team were stood down pending an investigation by the Crossrail project team.

Graham Askham  
Duty Controller,  
National Operations Centre

## Initial Investigation Findings

The COSS on site since Dec 23<sup>rd</sup>, commencement of the block. No prior familiarisation  
Team Leader (also a COSS) has been in the area over the last 4 years but only in major possessions  
2 Member Of Staff were labour and new to the area  
One Look Out

## Two planned activities in SSOWP

1. Planned activity to undertake track circuit testing within loc suite at 2.25mp on DN Relief SN127, this activity did not require them to be on the mains or cross the main lines.
2. Planned activity track circuit testing within a loc suite at 2.75mp requiring them to cross an open line (Carriage Line 25mph), the COSS had SSOWP pack and authority number for this activity.

## On Site

The COSS attended the ES brief initially requesting access across the mains, this was denied at 0845 30<sup>th</sup> Dec  
The COSS returned to the ES with a SSOWP with activity within the possession and signed in at 0906 30<sup>th</sup> Dec  
On walking out to the worksite the team became disorientated on site and crossed two open lines (Up and Dn Main), weather conditions contributing factor to this (heavy fog)  
All four members of the team were in the Dn Main cess and stood in a place of safety and acknowledged the driver

# Near Miss- Ladbroke Grove 30 Dec

## Control Measures found not being executed;

Red Zone working approval not in place – Project Director sign off required  
Supervisors not attending ES Briefs with their COSS  
COSS not adhering to ES briefing  
L/O protection was not suitable for weather conditions

## Immediate actions taken;

All Alstom staff were stood down, circa 36 people  
Alstom have stood all sites down and briefed the incident, debriefing each site specific open lines and fencing protection arrangements.  
TIC and SSOWP planners are being briefed on the incident  
Future Activities were reviewed in light of incident  
All teams will have an area familiar member going forward  
Supervisors will accompany COSS to ES Briefings  
Any COSS requesting unsafe practice of the ES will be held at the ES briefing room until the management team attend and verify work plan.



**NB photo not of incident- highlighting lack of visibility in fog**

## Extract from Lookout/Site warden Keypoint Card

### IN DARKNESS OR POOR VISIBILITY

You can only act as Lookout in darkness or poor visibility if:

- you are using LOWS or PEE WEE
- trains will not approach at more than 20mph and no distant Lookouts are needed
- the work is taking place within an ES's worksite and they have agreed that trains will not move at more than 20mph.

<https://safety.networkrail.co.uk/tools-resources/keypoint-cards/>



Always be sure the required plans and permits are in place, before you start a job or go on or near the line.

# Lost Time Injuries- High Potential incident- Shenfield Station, Crossrail Anglia

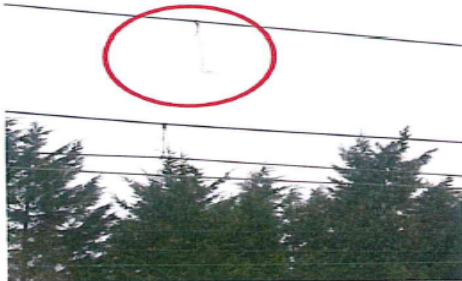
## Accident Details

On 01/01/2017, at approximately 06.30hrs, A gang of permanent way operatives were working on the Up Electric lines located towards the London end of Shenfield Station Platform 4. On the adjacent lines, an OLE team of 3No MEWPS were carrying out preparation for the de-wiring and removal of the existing OLE wiring systems. Whilst the preparation operations were undergoing, it appears that the existing OLE dropper suffered a shear failure causing the OLE to drop instantly and the remainder of the OLE to fall downward, the existing radius of the wiring allowed the cables to straighten and move across from the Down Electric to the Up Electric causing it to swing sharply hitting 2No of operatives working as part of the P/way gang on the Up Electric.

One operative was hit on the side of his head, causing cuts to his ear and a knock on the right hand side of his head. The other operative was struck in the arm by the cable and subsequently knocked to the floor causing bruises to his left elbow.

Immediately all activities stopped and both men were taken to Queen's Hospital, Romford for medical assessment. It has been confirmed that one of them had a minor cut on his right ear and some bruises to his right neck. The other operative had minor bruises to his left elbow.

## Photographs:



Failed Dropper



Worksite Location

## Initial Investigation findings:

The initial investigation shows that the existing OLE dropper had suffered shear forces during the dismantling works causing the main Auxiliary wire to drop instantly and swing to the adjacent Up Electric line striking the operatives.

- **Immediate Cause of the event:**

Failure of the shear dropper causing the contact wire to drop.

## Immediate Actions

- Exclusion Zones for all de-wiring are enforced
- Consider radial forces when deciding the size of the exclusion zone



Never enter the agreed exclusion zone, unless directed to by the person in charge.

## ***RIDDOR Injuries***

Injured Person during hand back phase, was measuring station platform edges using a measuring wheel, and fell from the platform onto the track.

The Injured Person suffered a fractured elbow and will require corrective surgery

All lines were in the possession, with no possible train movements..

### **Immediate Lessons Learned**

Measurements were taken from Track level as possession allowed access, therefore eliminating work from height.

Investigation continues.

For Good Practice and lesson learned on Height related incidents

[https://safety.networkrail.co.uk/advanced-search/?fwp\\_search=height](https://safety.networkrail.co.uk/advanced-search/?fwp_search=height)



NB Not actual X-Ray

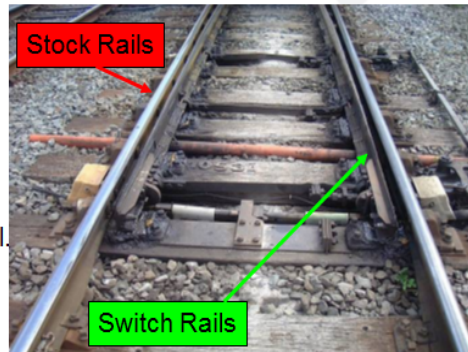
# Points Run Through

## So what is a Points Run Through

Trailing set of points which are not set in the in the correct position for that particular movement.

Facing set of points, when the switch rail is not set correctly against the stock rail thus allowing the rail wheel to spilt the points

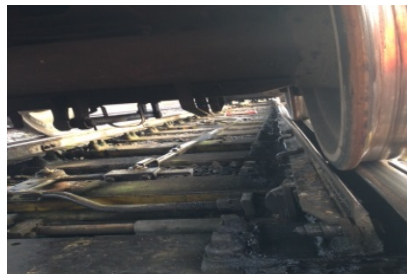
Damage occurs when either the rail wheels of a machine contact the point ends and distorts them or when the machine derails bending the switches as the wheels of the machine derail between the switch rail and stock rail.



### Stretcher Bar Damage



### Rail Wheels Splitting Points



### Why did they happen?

- Pressure? Time/peer pressure forcing corners to be cut.
- Complexity of possession?
- Communication misunderstanding/breakdown between all parties?
- Point Operator competence? Is there such a pull for staff over Christmas that we ask people to use competences rarely used?
- Lack of appropriate equipment?

### Potential Consequences?

- Damage to infrastructure.
- Derailment of plant, engineering trains, freight/passenger train.
- Additional risk to site staff fixing the damage, as well as increased pressure to try to catch up lost possession time.
- Cost of repair

### Christmas Lessons Learned

- Life Saving Rule "Never undertake a task unless you are trained, assessed as competent, and have the correct equipment"
- Ensure that your points operators and ES's are following points protocol- Rule Book GE/RT8000/HB4
- <https://safety.networkrail.co.uk/tools-resources/keypoint-cards/>
- Ensure appropriate equipment is available and easily accessible



# On Track Plant



Rail Mounted Maintenance Machine (RMMM)



Mobile Elevated Work Platform (MEWP)



Road Rail Vehicle (RRV)



Rail mounted Lorry (SRS, Unimog, etc)

There were a number of incidents relating to On Track Plant (OTP).

OTP striking overhead line equipment (7 occasions)

OTP striking cables (7 occasions)

As well as equipment failures on these machines. Including 7 hydraulic hose failures, and 5 other equipment failures

## Plant Operations Scheme (POS)

The purpose of the POS Rules are to define the compulsory mechanisms and minimum means of compliance for an organisation undertaking the provision and operation of OTP.

The scope of the POS Rules extends to all organisations carrying out OTP operations on Network Rail Managed Infrastructure (NRMI) and Network Rail projects.

Effective site control is a major factor in achieving worksite safety compliance. As part of the POS requirements there must be a competent representative on site whenever OTP operations are taking place. This role is known as the POS Representative, who must be an employee of the POS provider and be competent in delivering the POS providers arrangements for safe plant operations.

<https://safety.networkrail.co.uk/safety/on-track-plant-safety/pos/>

## *Driving Incidents*

The Christmas period saw 9 Road Traffic Accidents. Thankfully minor injuries only reported. At this time causes are not known.

However we do know that approx 95% of all on-road vehicle incidents are caused partially or wholly by human error, and a number of factors have been key to previous accidents including

- Fatigue
- Not driving to the weather conditions
- Speeding
- Distractions
- Vehicle Condition

If you drive, or manage members of staff who drive, do you..

Consider travelling time from base to worksite before allocating work? (Door to door time must not be planned to exceed 14 hours)

Plan your journey before hand?

Check condition of vehicle?

For advice

<https://safety.networkrail.co.uk/safety/winter-safety-campaign/>

<https://safety.networkrail.co.uk/safety/driving-safety/>

[https://safety.networkrail.co.uk/tools-resources/safety-bulletins/?fwp\\_bulletin\\_topic=driving](https://safety.networkrail.co.uk/tools-resources/safety-bulletins/?fwp_bulletin_topic=driving)

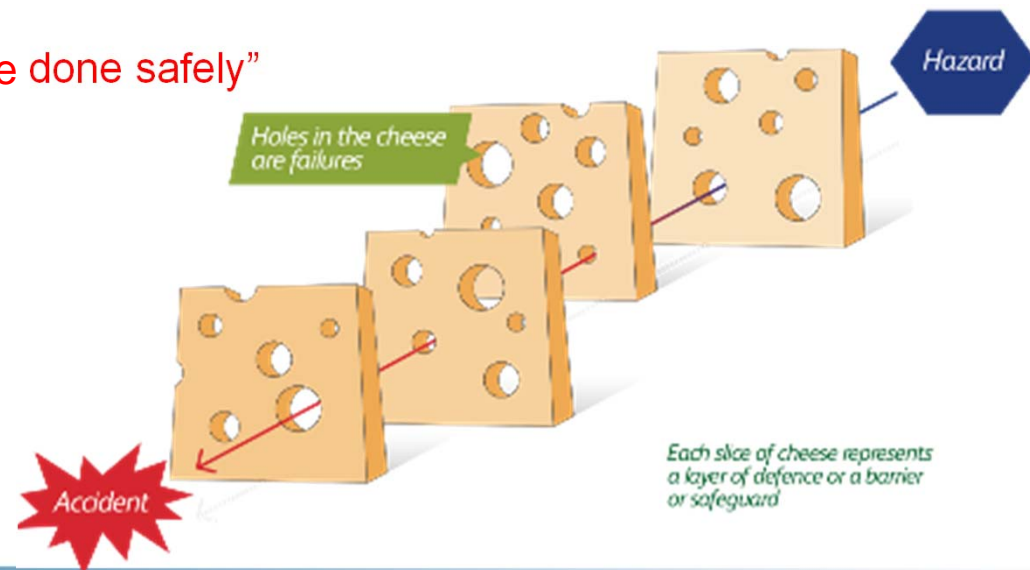
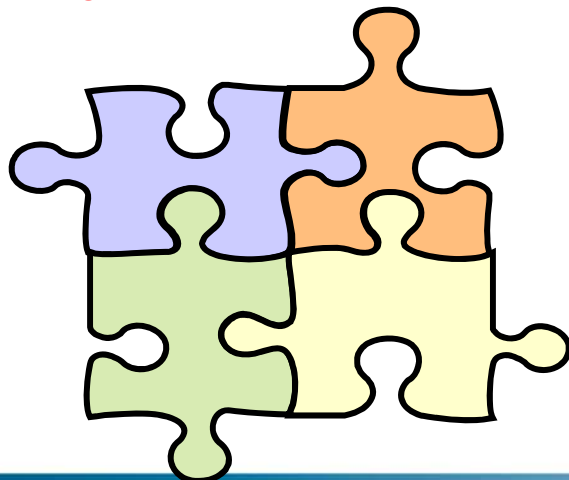
## Now we are all back to work

The festive period is over and we are all back to work however it is freezing cold and icy and the nights are long . We are all human and after a spell away from work we are likely to forget things, the important thing to remember is the safety and health of ourselves and our co-workers.

We want to encourage everyone to intervene in any unsafe acts to help work colleagues and other to be safe. When we are very familiar with our work environment we may make assumptions, and this may alter the way we see and appreciate risks.

It is important that we learn from previous incidents and we work together to make sure that we prevent our colleagues from being hurt in similar ways.

**“Nothing is so important that it cannot be done safely”**





# Getting you home safe every day

LIFE-SAVING RULES - AS EASY AS 1,2,3,4

## LEAVING HOME



1. Remember to drink and drive with the responsibility of a responsible driver.



2. Remember the speed limit and drive to suit the road.



## ON THE ROAD



3. Remember to have your mobile phone on silent or vibrate when driving. Do not use your mobile phone while driving unless you are safely parked.



4. Always use safety harness when working at height, unless you are protected by a safety net.

## ON SITE



5. Never enter the region of a live overhead line, unless authorised by the person in charge.



6. Never use equipment to which you are not authorised.



7. Always lock the door to the site when you leave.

## ARRIVING AT WORK



8. Remember to use your mobile phone safely. Do not use your mobile phone while driving unless you are safely parked.



9. Remember to use your mobile phone safely. Do not use your mobile phone while driving unless you are safely parked.



10. Remember to use your mobile phone safely. Do not use your mobile phone while driving unless you are safely parked.



## EVERYONE HOME SAFE EVERY DAY

