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STEM TALENT PARTNER OF CHOICE

Safety Briefing

May 2024

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Monthly topics

Driver Fatigue - Brake
- Link to online briefing about driver fatigue

Safety Central Safety Alert
- Serious Road traffic collision

Safety Central Shared Learning
- Incorrect installation of ESR equipment
- Welding Garments information

Safety Central Shared Learning
- Serious injury at Clapham Junction
- Runaway at Gravelly Hill
- Trackworker near miss
- Temporary RRAP left on an open line

Part of our group of Safety Bulletins

Safety Alert | Safety Bulletin | Safety Advice | Shared Learning

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https://www.brake.org.uk/get-involved/take-action/mybrake/knowledge-centre/driver-fatigue

Fatigue is a major cause of road crashes in the UK

10–20%

of all crashes are estimated to be caused by driver fatigue

6am

drivers are 20 times more likely to fall asleep at the wheel at 6am than at 10pm

1 in 8

drivers admit falling asleep at the wheel

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Safety Alert

A serious incident has taken place

Serious road traffic collision

Scope: **All Network Rail line managers, safety professionals and accredited contractors**

Ref: NRX24-01

Date: 13/05/2024

Location: M40, Northbound carriageway between Junctions 12 and 14

Contact: Leevan Finney, Engineering Services Director, Route Services

Overview

At around 02:45 on 8 May 2024 a serious road traffic accident (RTA) occurred on the M40 Motorway, near Gaydon in Warwickshire. Two members of staff employed by Vital Rail who had been working at a Network Rail worksite at Hemel Hempstead were in a vehicle heading north which collided with a lorry.

At present the cause of the collision is not known.

Both members of staff were taken to hospital. The passenger had sustained critical injuries and died in hospital later the same day. Our thoughts are with their family at this sad time.

Network Rail has begun a L3 Investigation and lessons learned will be shared as they emerge.

Areas to discuss in your teams: without prejudice to the ongoing investigation everyone is reminded of these general road safety considerations:

Safe Journey – Are there alternatives to driving? If not then plan your route, allow sufficient time, and don't rush, build-in rest breaks. Let others know your plan.

Safe Driver – only drive if fit to do so. Don't drive unless you are well enough to do so, tired, or otherwise distracted. Never drive under the influence of drugs or alcohol.

Safe Vehicle – choose the right vehicle for the journey, check your vehicle condition before driving: tyres, fuel, lights, brakes as per your company policy. Make sure your driving position is suitable.

Safe Driving – always obey road signs and drive according to road and weather conditions. Stay alert to other road users and keep your distance.

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Shared Learning

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Incorrect Installation of ESR Equipment

Issued to: **Network Rail line managers, safety professionals and accredited contractors**

Ref: NRL24-02

Date of issue: 02/04/2024

Location: Multiple sites

Contact: Gary Smith, Senior Engineer

Overview

There were several serious and concerning incidents during 2023, involving Emergency Speed Restrictions (ESRs) and Temporary Speed Restrictions (TSRs). Although the causal factors for each incident were slightly different, the common element was a failure to fully install and implement the speed restriction. These have led to unsafe situations with trains overspeed across the defect and the subsequent response caused unnecessary disruption to railway operations and our passengers. These incidents have also resulted in the maintenance teams accessing the infrastructure to inspect the positioning of the signage.

Incident One Overview: North, West & Central – 19th June 2023

This incident was where an implemented ESR did not have a magnet installed. This led to the train being withdrawn from service for an inspection, disrupting service and causing a safety hazard to the railway operation.

Key points

This was an installation issue.

The Team leader did not submit a photograph to their Section Manager or equivalent, quoting the location details of the ESR applied

Due to human error when reinstating back to the original TSR, the Permanent Way team forgot to reinstall the AWS magnet.

Incident Two Overview: East Coast South – 11th June 2023

This incident happened where a 20 mph ESR was erected due to hot weather precautions. There was an existing 20mph ESR in place on the Down Slow 2 line, with associated warning equipment already installed on the Down Fast from where it could be accessed.

With a lack of competent staff locally to undertake ESR designs, a Section Manager from a different area designed the Down Fast 20mph ESR, which did not consider other speed restrictions in the area owing to a lack of local knowledge. Staff were unable to install equipment on site as per the design.

It was realised post implementation of the speed on the 11th of June, that the order of the warning equipment was incorrect as staff had added the warning equipment for the Down Fast 20mph ESR beyond the pre-existing warning equipment for the Down Slow 2 (with directional arrow) 20mph ESR.

Key points

The ESR was designed by someone from a different area and did not consider other speed restrictions in the area owing to a lack of local knowledge.

The local Permanent Way team had insufficient competent staff to create or amend an ESR design.

The issue of the warning equipment for both ESRs being the incorrect sequence, was not reported nor escalated to Incident Control.

This incident has highlighted the challenge of compliantly providing warning equipment for speed restrictions in complex areas and alternative solutions are being explored.

Discussion points

- Are all staff involved within your DU trained and assessed as competent to carry out the certain parts of the speed application process? (see Fig.1)
- What issues do you face in obtaining the information you need to comply with design requirements?
- Are we 'taking 5' for safety in our work processes, which in turn could have stopped human errors from occurring in these incidents?
- Do we know the standards that relate to the implementation process?
- Is the current training and competency required adequate?
- Do we report every unsafe or irregular practises through the correct channels?
- Can technology help take away human error and what potential advances could there be?
- How do you assure that the speed restriction signage has been correctly installed?

Fig 1

Role	Description
ESR-U Designer	A competent person within Network Rail's Maintenance and Works Delivery function who is trained and assessed competent to produce an ESR-U design.
Proposer	Any person within Network Rail's Maintenance and Works Delivery function who, due to their capability to undertake role/work they have been assigned to, will identify the requirement for an unplanned ESR (ESR-U) to be imposed.
Team leader	Member of the track maintenance team who holds Tr11 competency (Confirm the track is fit for operational purposes following maintenance repair) who leads the installation team on site when providing speed restriction signs and equipment.
Track installation team	Made up of members of the track maintenance team who hold Tr01 competency (Maintain permanent way assets).
TSR signalling designer	A competent Signalling Designer (IRSE licensed) who can design, review and approve TSR/ESR designs.

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UPDATED - Welding Garments Information

Issued to: **Network Rail line managers, safety professionals and accredited contractors**

Ref: NRL24-04

Date of issue: 19/04/2024

Location: National

Contact: PPE Governance Mailbox

Overview / Underlying causes

Following examination of some NR supplied welding and grinding PPE garments it was found they did not meet the approved specifications for NR staff conducting these activities.

Investigations found that some garments were marked ARC Flash PPE and being used for welding activities.

PPE Garments with ARC Flash Labels are for Distribution & Power Plant Staff and other staff who access traction and HV non-traction locations according to the task. These Garments do not provide the full Levels of Protection for all those undertaking Welding & Grinding Activities.

The PPE Governance Panel has agreed some interim steps for short term supply of necessary Welders and Grinders garments.

The following are currently the PPE products that must be procured for use:

- NWR001W - Hi Vis Welding Protection Flame Retardant Waterproof Windproof breathable jacket.
- NWR002W - Hi Vis Welding Protection Flame Retardant Waterproof Windproof breathable trouser.
- NWR003W - Hi Viz WELDERS Flame Retardant COVERALL . NOTE: Limited immediate stock in all sizes is available to order through the punchout system.

Stocks are being checked and delivery times will be notified asap.

Investigations identified that incorrect PPE for welding/grinding had been mistakenly ordered through the Punchout system and staff had received ARC Flash Protective Garments not welding specific.

Arc Flash garments must be worn by staff accessing traction and HV non-traction locations in line with the requirements of NR/L3/MTC/RCS0216/DP01.
These activities are not the same as arc welding and the clothing does not provide protection from welding such as molten splashes and hot works.

Investigations also found non-compliant PPE have been purchased outside of the Company Governance process i.e. local PPE supplier, potentially due to the short-term delays / difficulties in receiving garments through the PPE ordering system. However, this is not the correct procurement process and had resulted in substandard PPE garments being provided.

Further work is being done by our supplier to produce Circa 500 Coveralls to the required specifications which should be ready for distribution in 6 to 10 weeks we will keep you and the Area H&S Safety Representatives informed of progress.

Staff attending Welding discipline training must wear the correct levels of PPE which includes having Coveralls.

GUIDANCE FOR THE SELECTION OF THE CLASS OF WELDERS' CLOTHING		
	SELECTION CRITERIA RELATING TO THE PROCESS:	**SELECTION CRITERIA RELATING TO THE ENVIRONMENTAL CONDITIONS:**
CLASS 1 TIG MIG	Manual welding techniques, light formation of spatters and drops, e.g.:	Operation of machines, e.g. of:
	• Gas welding	• Oxygen cutting machines
	• Tig welding	• Plasma cutting machines
	• Mig welding	• Resistance welding machines
	• Micro plasma welding	• Machines for thermal spraying
	• Brazing	• Bench welding
	• Spot welding	
	• MMA welding (with rutile-covered electrode)	
	Manual welding techniques, heavy formation of spatters and drops, e.g.:	Operation of machines, e.g. of:
CLASS 2 MAG CO_2	• MMA welding (with basic or cellulosecovered electrode)	• In confined spaces
	• Mag welding (with CO^2 or mixed gases)	• At overhead welding/cutting or in comparable constrained positions
	• MIG welding (with high current)	
	• Self-shielded flux cored arc welding (FCAW)	
	• Plasma cutting	
	• Gouging	
	• Oxygen cutting	
	• Thermal spraying	

See the classification table for ISO11611 for welding activities.

PERFORMANCE LEVELS

According to the performance requirements, EN ISO 11611 distinguishes between 2 classes of protection.

Class 1 – Protection against low risks

Specifies requirements for welding techniques and situations that cause the least amount of metal splash and low radiant heat.

Class 2 – Protection against higher risks

Specifies the requirements for welding techniques and situations causing more metal splash and higher radiant heat.

ISO11612 requirements have the classifications to meet heat resistance

PERFORMANCE LEVELS

The performance of garments meeting the EN 11612 standard is given by 6 indices.

A: Flame-spread behaviour – A1 (on face) and/or A2 (on edge)

B: Resistance to convective heat – B1 to B3

C: Resistance to radiant heat – C1 to C4

D: Resistance to molten aluminium splash – D1 to D3

E: Resistance to molten metal splash – E1 to E3

F: Contact heat resistance – F1 to F3

Key message

- All Staff in the Welding and Grinding community must order and purchase garments that are approved for use for NR Staff by the PPE Governance Panel. Use the C&P Punchout system when ordering.
- Only approved PPE obtained through the NR Procurement System will conform to all the specifications, and sub-categories, required for the different types of Welding carried out within Network Rail.
- PPE that has not been approved by the PPE Governance panel may not meet all the specifications required and could cause harm to the wearer.

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Serious injury at Clapham Junction

Issued to: **All Network Rail line managers, safety professionals, accredited contractors**

Ref: NRB24-02

Date of issue: 04/04/2024

Location: Clapham Junction, Southern Region

Contact: Eric Woodward, Head of Safety, Health & Environment

Overview

A serious accident involving a contractor working for South Western Railway occurred on Monday 11th March 2024 in the carriage wash area at Clapham depot.

This part of the bridge is Network Rail's accountability to inspect and maintain.

The contractor was undertaking maintenance activities and was fitting low-level overspray brushes onto the carriage wash. The injured person (IP) was standing on a wooden infill adjacent to the bridge parapet. While using the structure of the bridge as a workbench, the infill gave way causing them to fall through and land approximately 20 feet below onto another railway line (which is operated by a different route/control (which was operational at the time.

The response and recovery of the IP took almost 2 hours as information from site was unclear and there was uncertainty on the exact location on the infrastructure.

The incident is under investigation by ORR and jointly with South Western Railway and Network Rail.

Discussion points

- Do you and your team know and understand emergency arrangements on site?
- Where your site / area of accountability interfaces with an area of the railway which is leased to a third party, do you understand what your responsibilities for that area are and how would you go about clarifying these?
- How do you know where it is safe to stand, what action would you take if you were unsure or deemed an area unsafe?
- Do you check at the planning stage you have the correct tools and equipment to undertake your task?

Safety Bulletin

A serious incident has taken place

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Runaway incident at Gravelly Hill

Issued to: **All Network Rail line managers, safety professionals, accredited contractors**

Ref: NRB24-03

Date of issue: 05/04/2024

Location: Gravelly Hill, Birmingham

Contact: Rhys Evans, Workforce Health, Safety & Environment Advisor

Overview

At 02:31 on Wednesday 6th March 2024, a Welding & Grinding team were carrying out profiling of a rail head in a possession between Gravelly Hill and Lichfield Trent Valley. During the work activity the team lost control of the Rail Grinder, the machine travelled up a gradient initially and then onwards for approximately 4 miles uncontrolled before coming to a stop.

Thankfully, there were no injuries sustained and no significant damage to the infrastructure.

The machine has been quarantined and sent for testing to analyse whether mechanical failure could have been an underlying cause.

This incident is subject to an investigation.

Once the investigation has been concluded the findings will be published. In the meantime please discuss the below points amongst your team.

Discussion points

- How do you maintain control of a Rail Grinder or similar machinery?
- Do you carry out pre-user checks of Portable, Transportable and Mobile Plant (PTMP)?
- Are you operating all equipment in the way in which you have been trained?
- How do you control the risk of small plant and PTMP runaway?
- Does your PTMP have a service and maintenance regime?
- When was the last time an on-site assurance check was undertaken and what activities do you undertake to assure competence?

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Trackworker near miss

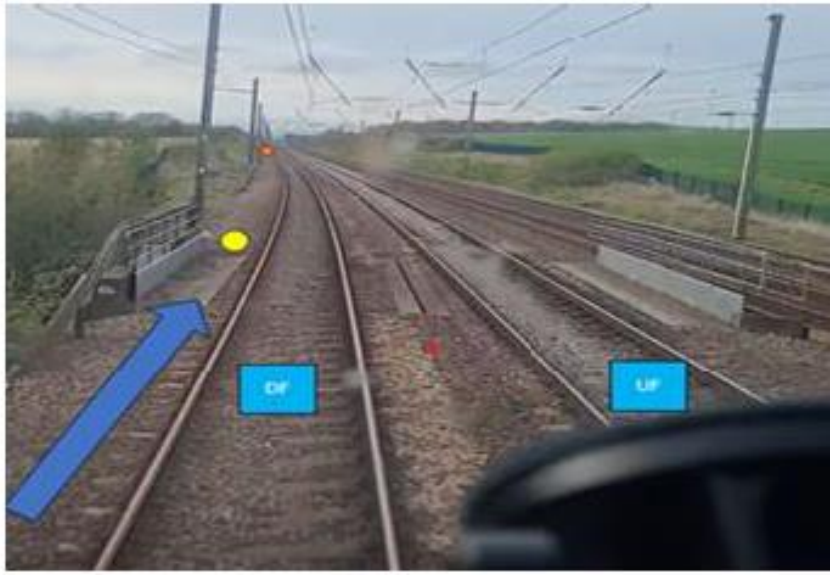
Issued to: **Network Rail line managers, safety professionals and accredited contractors**

Ref: NRB24-04

Date of issue: 30/04/2024

Location: Chiltern Green, Luton, Midland Main Line, East Midlands Route

Contact: Sharon Fink, Principal Safety Manager - Renewals & Minor Enhancements, Eastern Region



Overview

On 23rd April 2024 in the Chiltern Green area, Luton, ELR: SPC1, at approximately 09.50, a trackworker (a Telecomms Tester) was walking in the Down Fast (DF) Cess to return to their work group after leaving them to use the welfare at the original access point. All lines were open to traffic.

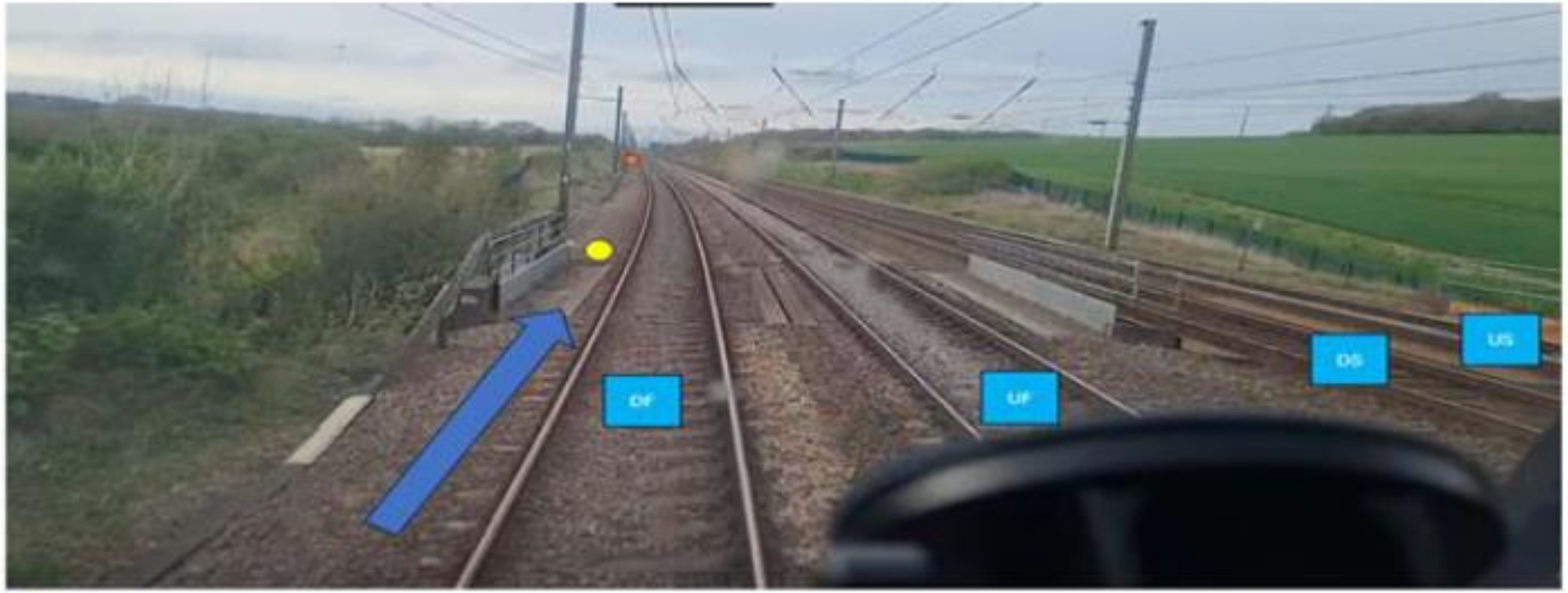
As part of the route back the trackworker approached and subsequently proceeded to cross limited clearance U/B 127. At which time a train on the DF approaching the bridge sounded their horn and applied its emergency brakes, as the driver of the train believed they were at risk of striking the individual.

The trackworker was not struck and there were no injuries suffered.

The Person in Charge / COSS of the work group which the trackworker was returning to immediately made a call to the Signaller to advise of the incident.

The Network Rail MOM was dispatched and attended site.

The team were stood down in a position of safety to await Drug and Alcohol testing.



Position of Tester1 – Near Miss location.

Group Position (Site Work)

Direction of travel by tester1 (walking towards the group away from the access point)

Discussion points

- How do you familiarise yourself with the site and planned works?
- How do you record, manage and document change on site?
- If a group member is required to leave the group, what should you do when working under the control of the COSS/PIC?
- Anyone going on or near the line should be clear about the access and egress points.
- Any COSS or PIC should ALWAYS be issued the Safe Work Pack to check and understand at least a shift in advance.
- What do you do if you identify an infrastructure concern within your Safe System of Work?

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Temporary road rail access panels (RRAP) left on an open line

Issued to: **Network Rail line managers, safety professionals and accredited contractors**

Ref: NRB24-06

Date of issue: 16/05/2024

Location: Kings Langley, West Coast South route

Contact: Karn Khanna, Head of HSE

Overview

On the 25th of April 2024, the first Avanti West Coast service travelling at line speed on the Up Fast line through Kings Langley struck a piece of temporary RRAP which had been left in the four-foot following emergency OHL repairs during the night. A second train travelling on the adjacent line (Down Fast line) also suffered a cracked windscreen from the impact of the temporary RRAP. There was no one injured, however if there were people on platform it would have caused serious injury or a worst case fatality. This led to significant disruption / cancellations on the West Coast South route.

The emergency work was completed, and the COSS handed back the site of work to ES at 03.09, declaring the line safe for the passage of trains. The ES handed back the worksite to PICOP at 05.06. Shortly after the possession was given up, 1R00 struck the piece of RRAP.

Initial investigation found that site lighting was not adequate and a reliance was on head torches. There was no system in place to count out and count in the RRAP pieces (approximately 20 pieces in this instance). Although the PIC stated they were not fatigued, they had a busy day before coming into work at night.

Similar incidents have happened recently in other routes, see Safety advice Ref: NRA23-14 and NRB24-01.

Discussion points

- Who is responsible for making the site of work safe after work is complete?
- When working as an ES, COSS or PIC, how do you verify the line is clear for the safe passage of trains?
- Any materials left on site **must be removed** from the running line(s), and secured (where required) in a position of safety before handing the site back to prevent damage or injury.
- When accessing an RRV you should plan to use a permanent or semi-permanent RRAP.
- The work should be planned in line with lighting requirements within risk control sheets, WARA's and relevant asset standards.
- It is your personal responsibility to make sure you have adequate rest before work and are fit to work.
- Relevant documents- GERT8000-HB12, NR/L3/OPS/084 & NR/L2/OHS/019.

Part of our group of Safety Bulletins

Safety Alert | Safety Bulletin | Safety Advice | Shared Learning

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Reminder to all Sentinel Card Holders & Checkers

Safety Central
Network Rail share updates of recent incidents, accidents and best practice advice online. Please get into the habit of checking this website for the latest news;
https://safety.networkrail.co.uk/tools-resources/safety-bulletins/

Southern Shield
Southern Shield is a collaborative safety forum that consists of Network Rail Southern Capital Delivery and its principal contractors. On their website they have useful articles and explain the rules of the Southern Shield charter, which a re mandatory on some southern sites.
https://www.southernshield.co.uk/

Railway Rule book
Add this website address to your browser favourites to ensure that you always have access to the Network Rail Rulebook modules

Previous monthly rail briefings
https://www.matchtech.com/about-us/health-and-safety/safety-briefings

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Work-safe Procedure

This is for anyone to use, it works as follows:

If you believe the Safety Arrangements to be inadequate:

- Stop Work and talk to the Team Leader or person in charge; they should:

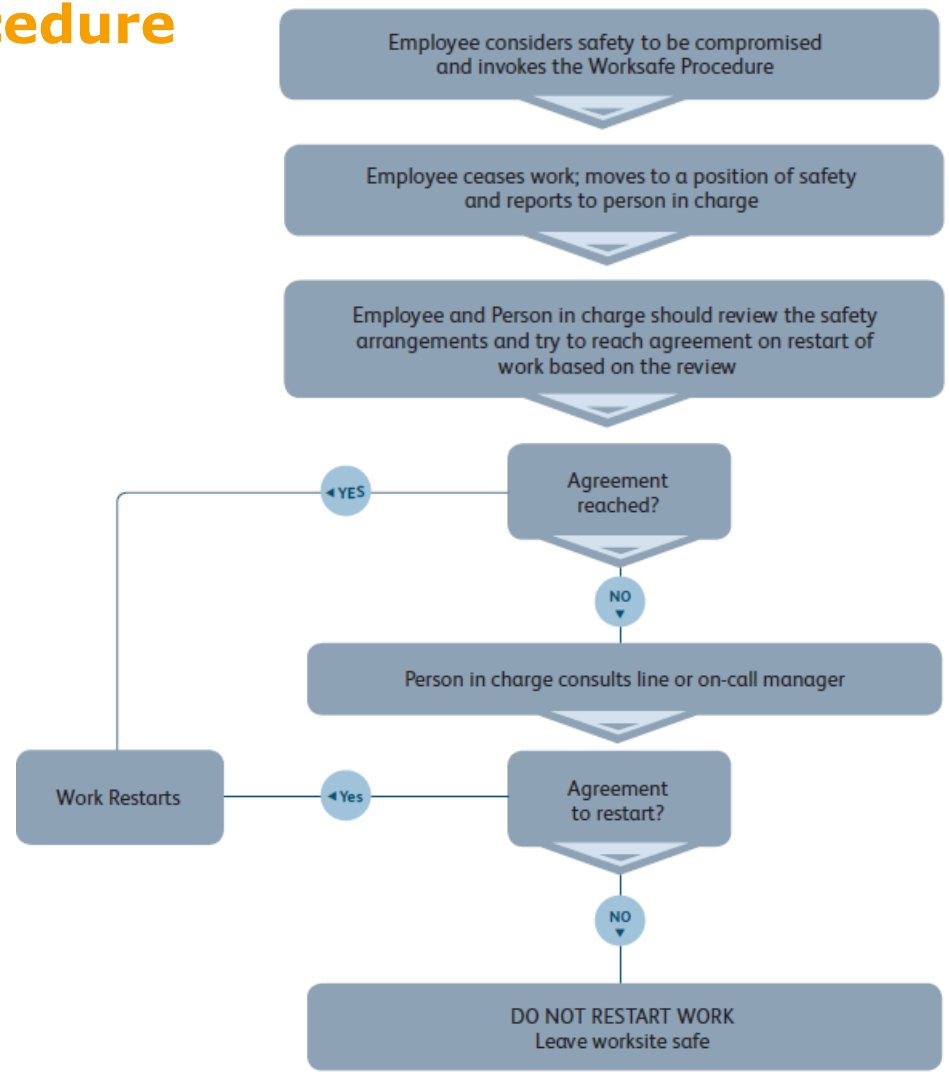
- Review the arrangements
- Change them if necessary and re-brief

If you are still unhappy DO NOT RESTART; escalate to the next level by contacting one of the following:

- Your Line Manager, Your Safety Rep, Any member of the management team, The DU Safety Advisor, Network Rail Control, MT on-call 07786 265531
- Do not start work until you are satisfied that the safety arrangements are appropriate to the activity

STEM TALENT PARTNER OF CHOICE

Work-safe Procedure



Changes to your shift times and increased fatigue risk

It is important that you notify your consultant as soon as possible if there is a change to you rostered work pattern while working on the Network Rail Infrastructure.

As part of our commitment to you and our obligations to monitor and manage your fatigue, we must always have an accurate understanding of where and when you are working.

In addition, you also have a legal obligation to ensure that you are safe to work,the Health and Safety at Work Act 1974. This states that “Workers have a duty to take care of their own health and safety and that of others who may be affected by their acts or omissions at work”

Do not start work until you are satisfied that the safety arrangements are appropriate to the activity

Never, ever drive while feeling tired

If you are starting to feel fatigued while you are onsite than instigate the work safe procedure.

Contact the Rail team

24 hour on call - 07786 265531

Use this on-call number if you need to contact someone from the company urgently, for example to report an accident / incident or if you are being pressured to do something that you are not comfortable with, such as being asked to exceed the working hours rules etc.

Store this number in your phone in case of an emergency.

This number is not to be used to query timesheets or to enquire about vacancies, it is an emergency contact number.

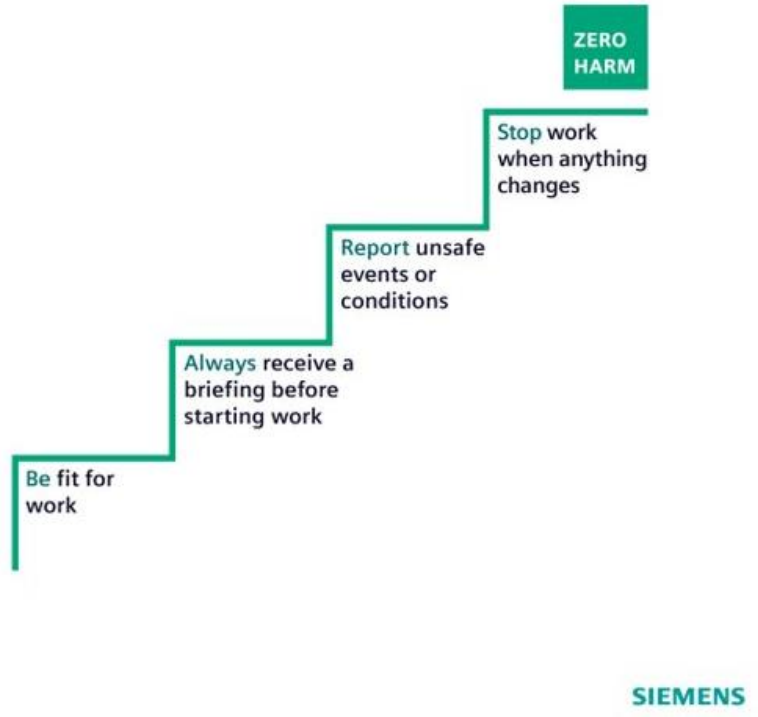
If you would like to suggest a topic for future safety briefings, or need to talk to someone in confidence then email the Rail HSQE manager Joe Christopherson; jchristopherson@matchtech.com

Your Feedback is always welcomed, email us at MT railonboarding@matchtech.com

Safety sQuaRed

See it, Scan it, Share it

https://www.gattacaplc.com/report-near-misses



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Our Lifesaving Rules

- Always be sure the required plans and permits are in place, before you start a job or go on or near the line.
- Never use a hand-held or hands-free phone, or programme any other mobile device, while driving.
- Always use equipment that is fit for its intended purpose.
- Always test before applying earths or straps.
- Never undertake any job unless you have been trained and assessed as competent.
- Never assume equipment is isolated – always test before touch.
- Never work or drive while under the influence of drugs or alcohol.
- Always use a safety harness when working at height, unless other protection is in place.
- Always obey the speed limit and wear a seat belt.
- Never enter the agreed exclusion zone, unless directed to by the person in charge.

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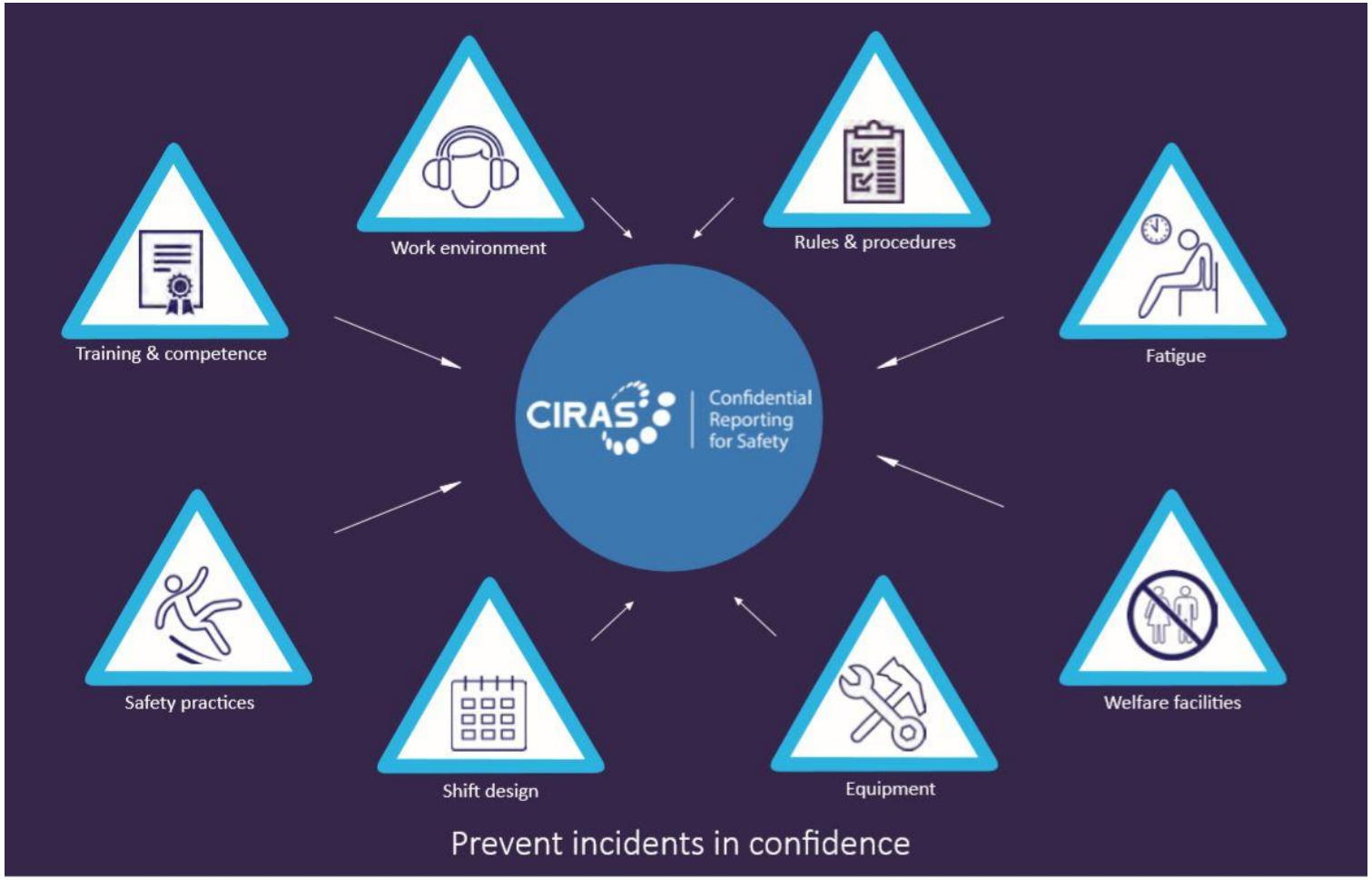

Report hotline:
0800 4 101 101

Report textline:
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Freepost: CIRAS
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