



Risk assessment and method statement

Rail RAMS

Work on or near the line under protection. Pre-filled with typical hazards, controls and sequence: edit it for this site.

PROJECT

SITE ADDRESS			
ACTIVITY		RAMS REFERENCE	
Work on or near the line under protection			
CONTRACTOR CARRYING OUT THE WORK		PRINCIPAL CONTRACTOR	
PREPARED BY	APPROVED BY	REVISION	DATE

Revision record

Reissue and rebrief when the sequence, the programme, the team or the conditions change. If you would have written it differently had you known, it needs a new revision.

REV	DATE	WHAT CHANGED	BY

THE WORK

The activity, the place and the people

Pre-filled for this kind of work. Make every line specific to this site: this sequence, this access, these people, this weather.

Scope of the activity

What is being done, and what is not included.

MHSWR REGULATION 3(1)

[Describe the task, e.g. renewal of 60 m of plain line] at [location, ELR and mileage], [line names]. Carried out under [possession / line blockage ref] on [date and shift times]. Electrification: [OLE / conductor rail / none]. Not included: [list any exclusions].

Location and access

Where on site, how people and materials get there, and the restrictions.

Access point [name and grid ref]; authorised walking route [description and distance] to the site of work. Vehicle parking at [location]. Laydown area [location], at least 2 m from any open line. Shift times [22:00 to 06:00].

Programme and interfaces

When the work runs, and who else is working nearby.

CDM REGULATION 15(2)

START DATE

DURATION

WORKING HOURS

INTERFACES WITH OTHER TRADES

Client: [infrastructure manager and route]. PICOP [name], engineering supervisor [name], other contractors in the work site [names]. Lines left open: [lines]. Signaller or Operations Control contact: [number].

Documents this RAMS relies on

Safe work pack [ref], authorised [date]. Possession or line blockage [ref]. Isolation or conductor rail permit [ref]. Construction phase plan and task briefing sheet. Plant certificates and lift plan [refs]. Asset Protection approval [ref] where needed.

The team, and their competence

CDM REGULATION 8

ROLE	NAME	CARD, TICKET OR TRAINING NEEDED	CONTACT
Everyone on or near the line		Personal track safety competence on a Sentinel card, with a primary sponsor, and medical and drugs and alcohol screening to the infrastructure manager's policy.	
COSS		Controller of site safety, to Rule Book Handbook 7, for any group on or near the line. Only a COSS or an IWA (individual working alone) may work alone.	
Person in charge		Named in the safe work pack under Network Rail's NR/L2/OHS/019; holds the COSS competence and is on site while the work is done.	
Protection controller		Where a line blockage is shared, the PC manages it with the signaller and the COSSs work under it.	
PICOP and engineering supervisor		Manage the possession and each work site, appointed under the client's arrangements.	
Machine controller and plant operator		Competent for the on-track plant and the role, to Rule Book Handbook 15, with the competence on their Sentinel record.	

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METHOD STATEMENT

The sequence of work

The order the team will work in on the day, with the controls built into each stage. If the sequence changes on site, revise the RAMS and brief it again.

STAGE	WHAT IS DONE, AND HOW	CONTROLS AT THIS STAGE	BY
Plan the work and access	Agree the scope with the client. Book the possession or line blockage through the client's process. Write the RAMS and pass its task risks to the planner for the safe work pack.	Safe system chosen from the client's hierarchy; isolations and plant booked; RAMS accepted by the client or principal contractor.	Contracts manager
Verify the safe work pack	The person in charge reviews and verifies the safe work pack with the planner, at least a shift before the work. The responsible manager then authorises it.	Pack checked against the site, task and operational risks; no one person plans, verifies and authorises it.	Person in charge
Check people and plant	Check each person's competences, sponsor, medical and hours on Sentinel. Check plant certificates, limiters, test equipment and marker boards.	Personal track safety, COSS, machine controller and plant competences in date; test equipment calibrated.	Supervisor
Arrive, swipe in and brief	Meet at the access point, swipe in with Sentinel cards and receive the safe system of work briefing. Everyone signs the briefing form to show they understand it.	Briefing covers protection, position of safety, isolations, exclusion zones and the emergency plan.	COSS
Walk to the site	Walk as a group from the authorised access point along the authorised route to the site of work, with the COSS.	COSS present throughout; position of safety used for every train; nothing carried that stops anyone seeing or hearing.	COSS
Set up protection	Take the line blockage or, in a possession, get the engineering supervisor's authority and set up the safe system within the work site. Confirm any isolation in writing before work.	Marker boards placed as the plan shows; isolation and earthing confirmed; protection tested where the system requires it.	COSS
Bring plant on track	On-track plant goes on at the agreed point under the machine controller. Limiters are set and tested, and exclusion zones are marked out.	Movements authorised by the engineering supervisor; nobody inside an exclusion zone unless directed by the person in charge.	Machine controller
Carry out the work	Carry out the task to this method statement. The COSS stays with the group and watches it. If anything changes or feels unsafe, stop and use the Worksafe procedure.	Tools kept 2 m from open lines; noise and dust controls on; nobody works apart from the group without another COSS.	COSS
Clear up and hand back	Remove all people, plant, tools and materials. Check the track and equipment, then give up the work site or line blockage and cancel any isolation as the client's procedures set.	Person in charge confirms the line is safe for the passage of trains before hand back.	Person in charge

CDM REGULATION 15(2): PLAN, MANAGE AND MONITOR THE WORK

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RISK ASSESSMENT

Hazards, controls and the risk that remains

Each significant hazard rated before and after its controls, as likelihood times severity. The ratings are typical: check them for this site.

	LIKELIHOOD		SEVERITY		
	1	2	3	4	5
5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5
	1	2	3	4	5

1 to 4 low
 5 to 12 medium
 15 to 25 high

HAZARD	WHO COULD BE HARMED, AND HOW	RISK BEFORE	CONTROLS	RISK AFTER	BY
Struck by a train on an open line	Track workers setting up, working or moving on or near a line where trains are running.	3 x 5 = 15 High	- Protection by a line blockage or possession, or a warning system, chosen from the hierarchy in the client's standard and set in the safe work pack. - A COSS sets up the safe system of work, briefs it, and stays with the group while it is on or near the line. - Position of safety identified for every location: at least 1.25 metres from the nearest line, or 2 metres where the speed is over 100 mph.	1 x 5 = 5 Med	COSS
Warning from a lookout failing	A group relying on a site lookout to warn them of approaching trains.	3 x 5 = 15 High	- Lookouts used only where the Rule Book and safe work pack allow: approaching trains limited to 25 mph and one running line leading on. No distant or intermediate lookouts. - No lookout warning in darkness, poor visibility or in or near a tunnel. - Lookouts do that duty only and are never distracted. Under Network Rail's standard the person in charge is never the lookout or site warden.	1 x 5 = 5 Med	
Walking to and from the site of work	Staff walking between the access point and the site, alone or with others.	3 x 5 = 15 High	- Authorised access points and walking routes used; nobody walks on or near the line with others unless a COSS is with them. - Anyone walking alone looks up at least every 5 seconds, to be in a position of safety at least 10 seconds before a train arrives. - No phones while walking: stop in a position of safety first. Never step on rails or sleepers, or between the movable parts of points.	2 x 5 = 10 Med	
Engineering trains and plant in a possession	Workers inside a work site where engineering trains and on-track plant are moving.	3 x 5 = 15 High	- Movements of engineering trains and plant in the work site authorised by the engineering supervisor. - On-track plant controlled by a machine controller, with the operator briefed on the limits of the work site. - Exclusion zone round each machine; nobody enters it unless directed by the person in charge.	1 x 5 = 5 Med	Engineering supervisor
Plant fouling an adjacent open line	Train crews and passengers on an adjacent line, and workers if a machine slews or travels out of position.	2 x 5 = 10 Med	- Adjacent line blocked where plant could foul it; where it stays open, the plan sets how plant is kept clear under the client's rules. - Slew and height limiters set and tested before work, to the configuration in the plan. - Machine controller watches the clearance throughout and stops the machine if it is lost.	1 x 5 = 5 Med	
Overhead line equipment at 25,000 volts	Anyone in an AC electrified area handling long tools, rail, scaffold tube or plant near the wires.	2 x 5 = 10 Med	- Overhead lines treated as live unless an overhead line permit issued to the COSS states they are isolated and earthed. - You and anything you hold stay at least 2.75 metres from live overhead line equipment, unless a method statement or company instruction allows less and its precautions are used. - Isolation and earthing only by a nominated person under the infrastructure manager's instructions.	1 x 5 = 5 Med	Person in charge
Conductor rail at 750 volts DC	Anyone working in a third rail area, especially when crossing the line or moving materials.	3 x 5 = 15 High	- Conductor rail treated as live unless a conductor rail permit is issued to the COSS, or another isolation the infrastructure manager allows is in place. - Never step on the conductor rail, guard boarding or between the conductor rail and the running rail. - Stay at least 1.5 metres away unless an approved method statement and electrical risk assessment allow less; within 300 mm, fit a conductor rail shield if possible.	1 x 5 = 5 Med	
Lineside cables and signalling equipment	Workers digging, driving stakes or moving troughing; and trains if signalling is damaged.	3 x 4 = 12 Med	- Cable routes found from records and a survey before any ground is broken, under a permit to dig. - Cables beside and crossing under the line treated as live; nobody interferes with them or their covers unless the plan allows it. - Any damage reported to the signaller at once so trains can be protected, then to the electrical control operator for power cables.	1 x 4 = 4 Low	

MHSWR REGULATION 3(6): WITH FIVE OR MORE EMPLOYEES, RECORD THE SIGNIFICANT FINDINGS

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RISK ASSESSMENT, CONTINUED

More hazards, and those specific to this site

HAZARD	WHO COULD BE HARMED, AND HOW	RISK BEFORE	CONTROLS	RISK AFTER	BY
Tools and materials left near the line	Train crews and passengers, and workers hit by items moved by a passing train.	3 x 4 = 12 Med	- Nothing placed closer than 2 metres to a line where a train can pass, unless it cannot be hit or moved by slipstream. - Materials stacked and secured in the agreed laydown area, away from walking routes.	1 x 4 = 4 Low	
Handing back a line that is not safe	Train crews and passengers on the first train after the work is given up.	2 x 5 = 10 Med	- Person in charge checks that every person and every item that could affect the line has been removed before hand back. - Track, points and equipment checked against the plan; any test or line clear verification the client requires is completed. - Isolations cancelled and boards removed only in the order the client's procedures set.	1 x 5 = 5 Med	Person in charge
Manual handling of rail, sleepers and ballast	Track workers lifting, carrying and placing heavy, awkward materials on uneven ground.	4 x 3 = 12 Med	- Rail, sleepers and heavy components moved by plant or rail handling equipment wherever practicable. - Team lifts planned and briefed where hand handling remains, with clear, level footing. - Gloves with good grip; nobody carries long items over a live conductor rail.	2 x 3 = 6 Med	
Slips and trips on ballast and track	Anyone walking or working on ballast, sleepers, cable troughing and uneven cess.	4 x 2 = 8 Med	- Walking routes kept clear of spoil, offcuts and stored materials. - Safety footwear with ankle support; lamps or task lighting for night work.	2 x 2 = 4 Low	
Noise masking warnings	Workers using rail saws, drills, tampers and plant who need to hear a warning or a horn.	3 x 5 = 15 High	- The warning or protection chosen in the plan works over the noise of the task. - Hearing protection selected so that warnings can still be heard, and worn where noise assessment requires it. - Noisy work stops the moment the warning is given; nobody leaves the position of safety until the COSS says so.	1 x 5 = 5 Med	
Dust from ballast and cutting	Workers cutting concrete sleepers, drilling or handling dry ballast.	3 x 3 = 9 Med	- Water suppression or extraction on saws and drills, and ballast dampened where it is dusty. - Face-fit tested respiratory protection where dust remains.	2 x 3 = 6 Med	
Fatigue from nights, weekends and travel	Workers on night and weekend possessions, especially after long journeys to site.	3 x 4 = 12 Med	- Hours planned within the law, the client's limits and the sponsor's fatigue arrangements, whichever is shortest. - Nobody reports for duty within 12 hours of working on the infrastructure unless the primary sponsor has risk assessed it and set controls. - Travel time counted in the plan; anyone too tired to work safely says so and is stood down.	2 x 4 = 8 Med	
Drink and drugs	Anyone in a safety critical role, and everyone relying on them.	2 x 5 = 10 Med	- Infrastructure manager's drugs and alcohol policy applied, including screening and testing where it requires. - Anyone unfit through drink or drugs is not put to work; medication that may affect safe working is reported before work.	1 x 5 = 5 Med	
Darkness, poor visibility and tunnels	Workers on night shifts, in fog or heavy rain, and in or near tunnels.	3 x 5 = 15 High	- Safe system of work chosen for the conditions; lookout warning is not used. - Everyone carries a suitable lamp; the site and access route are lit as the plan requires. - Work stops and the plan is reviewed if visibility drops below what the safe system relies on.	1 x 5 = 5 Med	
Works beside the railway boundary	Train crews, passengers and track workers below cranes, scaffold or excavations on neighbouring land.	2 x 5 = 10 Med	- Network Rail Asset Protection contacted before work starts, with its approval for any work on its land. - Cranes, plant, scaffold and hoardings planned so they cannot fall onto the railway; nothing oversails the line unless Asset Protection has agreed it. - Boundary fence kept secure throughout; any change agreed with Asset Protection first.	1 x 5 = 5 Med	

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EQUIPMENT

Plant, equipment and PPE

Plant and equipment

Each item, the checks and certificates it needs, and who may operate it.

PUWER 1998, LOLER 1998

ITEM	CHECKS AND CERTIFICATES	OPERATOR COMPETENCE
Road-rail vehicles and on-track plant	Certificates in date; daily checks; limiters set and tested before work.	Competent OTP operator
Rail saws, drills and hand-held plant	Checked before use; guards fitted; dust control and vibration time planned.	Trained operative
Track warning or protection equipment	Tested before use to the manufacturer's and the client's instructions.	Trained in the system
Possession limit and marker boards	Complete, lit where required, and placed where the plan shows.	PICOP or ES team
Isolation test equipment and earths	Calibrated and in date; used as the isolation instructions set out.	Nominated or authorised person

Personal protective equipment

PPE is the last line of defence, after the controls above. Specify the type, not just the item.

PPE AT WORK REGULATIONS 1992

ITEM	NEEDED	TYPE AND SPECIFICATION
Safety helmet	☒	To client standard
Safety footwear	☒	Ankle support, grip sole
High-visibility clothing	☒	Employer issue, client standard, sponsor marked
Gloves	☒	Grip gloves for rail and tools
Eye protection	☒	For cutting and drilling
Hearing protection	☒	Chosen so warnings can be heard
Respiratory protection Type, and face-fit tested	☐	
Harness or restraint Anchor points identified	☐	

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CONTROLS

Substances, permits, emergencies and the environment

Hazardous substances

Each substance and its COSHH assessment.

COSHH 2002, REGULATION 6

SUBSTANCE	COSHH ASSESSMENT REFERENCE	CONTROLS

Permits and plans

PERMIT OR PLAN	NEEDED	REFERENCE
Hot work permit	☐	
Permit to work	☒	
Permit to dig or break ground	☒	
Confined space entry	☐	
Lift plan	☒	
Temporary works design	☐	

Emergency and rescue

First aid, fire, and how someone is rescued.
The rescue plan belongs in the RAMS, not after it.

Report an accident to the signaller or Operations Control: say "This is an emergency call", then your name, exact location, whether any line is obstructed and the services needed. Stop trains with a hand danger signal if a line is in danger. Warn emergency services of live overhead lines or conductor rail. Access point, first aider and hospital named in the briefing.

Environment and neighbours

Dust, noise, vibration, waste, spills and hours of work.

Noise at night kept to the minimum the task allows, with neighbours told where the client requires. Spoil, old ballast, sleepers and rail removed to approved disposal routes. Fuel stored in banded containers away from drains and watercourses. Access gates closed and locked.

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Briefed before the work starts

DATE AND TIME

A SIGNATURE AGAINST A REVISION, ON A DATE, BEFORE THE WORK STARTED, IS HOW A BRIEFING IS EVIDENCED

A pre-filled starting point, not legal advice. Edit it for the site and have it approved.