

KEYPOINTS

**ENGINEERING
SUPERVISOR
(ES)**

Issue ten valid from December 2013

**CERTIFICATION REQUIRED: CURRENT SENTINEL
CARD ENDORSED WITH PTS, IWA/COSS AND ES
COMPETENCIES**

Keypoint Cards have been produced for many of the track safety competencies, as a reminder of the main duties, rules and requirements.

Further copies are available from Willsons Group Services.

To obtain an order form, email:

denise@willsons.com

(phone **01636 702334** or fax **01636 701396**)

BASIC REQUIREMENTS

You must:

- wear a yellow armlet or badge with 'ENGINEERING SUPERVISOR' in blue letters
- have your Sentinel card with you, endorsed PTS, IWA/COSS and ES
- Please note that the TOCs and FOCs do not use Sentinel competence cards. They use an orange card and this is a valid form of proving that a person from a TOC or FOC holds the competence on the card.



SETTING UP A WORKSITE

Authority

You must not allow work to start until:

- the possession has been granted
- any movement authorised by the PICOP has passed clear or stopped short of the worksite or is standing at the designated signal within the area where the worksite is to be set up
- the PICOP has given you his/her full initials and the authority to start work and the details have been entered on the Engineering Supervisor's Certificate (RT3199)
- marker boards have been erected at the agreed locations
- each IWA and COSS has been briefed and signed in.

You may allow isolation of AC or DC equipment to start whilst placing worksite marker boards

Putting up marker boards

Marker boards must be placed in the four-foot, at least 100 metres (100 yards) beyond each end of the worksite.



Entrance to the worksite



Exit from the worksite

If the detonators protecting the possession are within 100 metres (100 yards) of the worksite, put the marker board at the detonators.

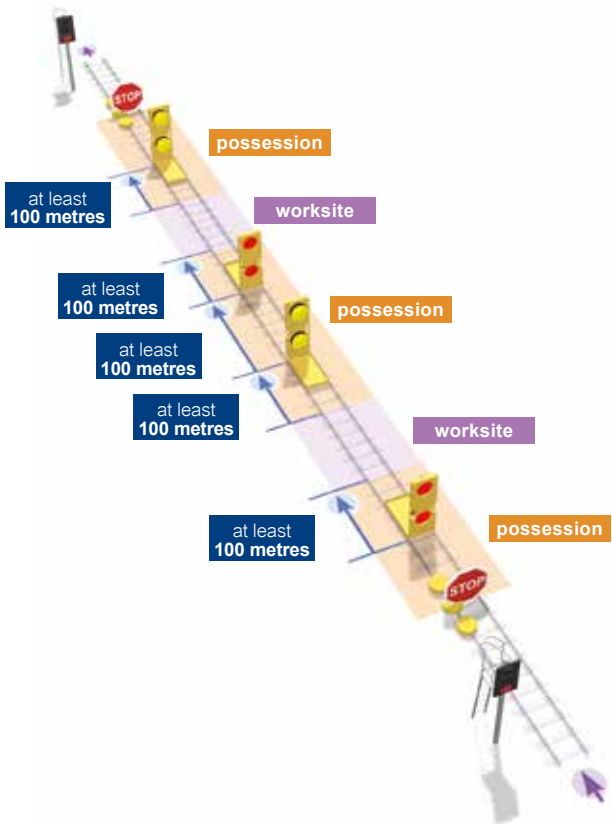
Marker boards are not required if:

- there are no engineering trains or on-track plant (OTP) in the possession

If the marker board for one worksite would be within 100 metres (100 yards) of the marker board for another worksite:

- the worksites must be combined into one larger worksite
- one ES must be appointed to control train movements into and within the larger worksite.

Normal position for worksite marker boards



Possession Support (PS)

The role of the PS is to

- place PICOP protection
- key signals to danger under signals authority
- secure un-worked points
- lift and replace protection to allow an engineer train to enter or leave a possession

Additional Duties of the PS

- may assist in putting up ES Marker Boards

IWAs & COSSs

You must agree with each IWA and each COSS:

- the limits of their site of work
- the nature of the work, and
- the Safe System of Work they will use

You must enter the details of your agreement on your Engineering Supervisor's Certificate and get the IWA/COSS to sign it.

If you are also acting as COSS, sign the RT3199 Appendix A.

CONTROLLING TRAIN MOVEMENTS

General requirements

You are responsible for authorising train movements into and within the worksite.

Before authorising a movement:

- make sure it is safe for the movement to take place
- ask the signaller to set any points in the required position or, if they cannot, arrange for a competent person to do so
- warn anyone working on the train that it is about to move and they must stay where they are
- warn anyone working near the train that it is about to move and they must go to a position of safety.

Recording details of a movement:

- You must record the time you authorise each movement. You must also record the time you are told when a movement has been completed.

Giving instructions to the driver

Make sure you clearly brief the driver about what to do and how far to go. You can appoint a competent person to travel in the cab and give your instructions about the working of the train.

Make sure you:

- remind the driver to make the movement at caution (**no more than 5mph**) and stop when given a hand signal
- give specific instructions if a movement is to be made past a signal at danger
- follow the Rule Book/Handbook requirements when passing over level crossings or unworked points.

Entering the worksite

When a train is going to enter the worksite, make sure:

- it stops at the marker board before the board is removed
- the marker board is replaced as soon as the train has entered the worksite.

Propelling movements

Propelling movements are allowed within a worksite as long as:

- the movement can be made safely
- it is controlled in line with module SS2 and Handbooks 14 and 15 of the Rule Book.

Marker board positioned at the detonators

If a marker board is positioned at the detonators:

- get the PICOP's permission before authorising any movement towards the detonators
- tell the PICOP when the movement has been completed.

Controlling train movements by handsignals

If a train movement is being controlled using handsignals:

During daylight



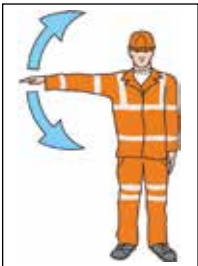
Move **away** from the ES



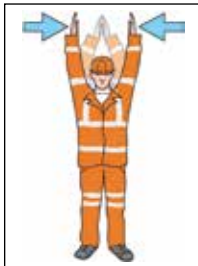
Move **towards** the ES



Stop immediately



Slow down



Ease up

During darkness



Slowly move **away**
from the ES



Slowly move **towards**
the ES



Stop immediately

Controlling train movements by radio

The competent person controlling the movement shall instruct the driver/OTP operator and other relevant personnel:

- The scope and extent of the movement
- The maximum speed authorised for the movement
- If there are any signals that require to be passed at danger
- If the movement passes over any points that they have been correctly set or secured for the safety of the movement
- How the movements will be authorised to pass over any level crossings within the scope of the movement
- The format the instruction will be communicated in (confidence, tone or continuous verbal)
- That they must stop if the confidence, tone or continuous verbal communication cannot be heard
- If a countdown protocol is to be used and the format of it.
- Remind the driver to make the movement at caution (no more than 5mph) and top when given a hand signal.

Note: Continuous verbal communications mean that the driver/OTP Operator and other relevant personnel must receive a verbal communication at a minimum interval of every two seconds.

GENERAL SAFETY CHECKLIST

Always make sure that staff:

- stand clear when wagon doors are being opened
- don't stand in front of an open wagon when materials are being unloaded
- clear any debris which might fly up if struck by materials being unloaded
- don't stand in front of a person using a bar
- don't sit on the side of a wagon when it is to be moved
- don't cross from one wagon to another during a movement
- only get on and off a wagon using the authorised method
- don't unload sleepers or rails from moving vehicles (except rails from a long welded rail train)
- close spring doors before moving wagons.

Check Certificate of Readiness is completed

CHANGE OF ENGINEERING SUPERVISOR

If you are going off duty:

- fully brief the new ES on the worksite arrangements
- give your RT3199 to the new ES
- give the new ES's name to the PICOP.

SUSPENDING THE WORK

If work is being suspended at your worksite but will resume later during the possession:

- tell the PICOP
- leave the marker boards in position
- keep your RT3199 or give it to the person taking over as ES.

WHEN THE WORK IS COMPLETED

Signing out

When work has been completed at your worksite, make sure:

- everyone is clear of the line or, if some remaining work is to continue, the IWA/COSS is satisfied that the possession arrangements are not needed
- each IWA and COSS signs out on your RT3199.

If you are also acting as COSS, sign the RT3199 Appendix A.

Removing the marker boards

When each IWA and COSS has signed out:

- tell the PICOP that the work which required the worksite arrangements has now been completed
- tell the PICOP that anyone remaining on the line knows that normal trains movements are resuming
- ask the PICOP for permission to remove the marker boards
- remove **all** the marker boards.

You will not be given permission to remove the marker boards if the PICOP has already authorised a train movement towards the worksite.

Confirming the line is clear and safe

When all the marker boards have been removed:

- sign Section 3 of your RT3199
- give your RT3199 to the PICOP
- confirm to the PICOP that the line within the worksite is clear and safe for trains.

If you cannot give your RT3199 to the PICOP:

- confirm to the PICOP that the requirements of Section 3 of your RT3199 have been completed
- sign Section 3 of your RT3199
- return your completed RT3199 as per company instructions.

PERSON IN CHARGE OF A SIDING (PICOS)

Before allowing engineering work or on-tracking of OTP to take place in a siding or group of sidings, a PICOS will be appointed to take possession of the sidings concerned.

In order to perform the role of PICOS you must hold current competencies in COSS or IWA.

Ideally a PICOS will take possession of the whole of each affected siding.

An IWA must not arrange a possession in sidings for the protection of anyone except themselves.

You, as the PICOS need to agree with the person operating the siding(s) about the following details:

- Your name and contact information.
- The location of the siding(s) (there may be more than one) involved and if the possession will take up the whole length of a siding or part of it.
- How you will arrange line protection this will be either via the signaller, securing the points, sleeper secured across rails with a PLB, red flag or red light placed at the sleeper.
- The date and time you will take possession and by when it will be given up.

The PICOS needs to record the following

- The date and time each COSS, DP or IWA confirms they no longer need to share your protection
- The date and time the possession is given up.
- Your company should supply a form for you to record the details.

LINE CLEAR VERIFICATION

The main purpose of the process is to verify that all vehicles that have accessed the possession have subsequently exited.

The responsibility of the ES is:

- As part of any worksite brief the ES will make sure each MC or COSS (when a trolley is required) is aware that the LCV process will be utilised, has been briefed and is in possession of a Vehicle Management Form (VMF).
- To permit vehicles to access the worksite and retain a record on the VMF.
- To verify and record that all vehicles have exited the worksite.
- Prior to handing back the worksite, the ES will cross reference that all records on their VMF correspond to the PICOP's VMF.
- To initiate a work site sweep by giving clear instructions to the competent person and recording this on the VMF.

EFFECTIVE SAFETY CRITICAL COMMUNICATION

ABC of safe communication

A – Accurate

B – Brief

C – Clear

You must always:

- Use the phonetic alphabet to give signal/OLE post information and to clarify names and locations that are difficult to pronounce or which may not be correctly recognised.

MAKE SURE YOUR MESSAGE IS UNDERSTOOD

To make sure your message is understood:

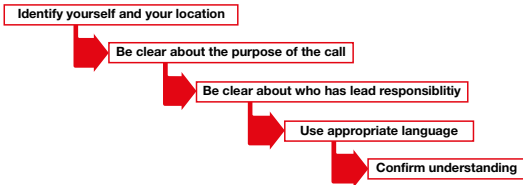
You must always speak:

- With the mouthpiece close to your mouth (but not too close)
- Directly into the mouthpiece
- Slightly slower than normal, with a natural rhythm
- At the same volume as you would in normal conversation.

You must always:

- Use clear sentences
- Use normal railway words and phrases found in the rules, regulations and instructions
- Use the phonetic alphabet – to check your message is understood correctly
- Try to avoid hesitation sounds (for example, 'um' or 'er') and slurring one word into another
- If the other person responds or speaks in an accent or dialect which is unfamiliar, take time to make sure your message is understood and that you understand his or her message.

COMMUNICATION PROTOCOL



PHONETIC ALPHABET

Phonetic alphabet

Be sure to pronounce numbers one digit at a time. For example, '1702' would be pronounced 'one-seven-zero-two'. Always be sure to say 'zero' for the figure '0' and not 'nought' or 'O'.

Exceptions are as follows:

- When you refer to times weights and measurements e.g. time 1317 hours should be stated as thirteen seventeen hours
- When you refer to Rule Book and Handbook modules e.g. T10, you may use T Ten

A Alpha	B Bravo	C Charlie	D Delta	E Echo	F Foxtrot
G Golf	H Hotel	I India	J Juliet	K Kilo	L Lima
M Mike	N November	O Oscar	P Papa	Q Quebec	R Romeo
S Sierra	T Tango	U Uniform	V Victor	W Whisky	X X-ray
Y Yankee	Z Zulu				

PHRASES TO USE

Phrases to use when using a radio or telephone

Phrase	Meaning
'This is an emergency call.'	This message conveys information which requires immediate action to prevent death, serious injury or damage
'Repeat back.'	Repeat all of the message back to me
'Correction.'	I have made a mistake and will now correct the word or phrase just said

Phrases to use when using a radio and only one person can be heard at a time

Phrase	Meaning
'Over.'	I have finished my message and am expecting a reply
'Out.'	I have finished my message and I do not expect a reply

Do not use phrases such as 'not clear' or 'not safe' to describe a line that is unsafe.

Always use the phrase 'line blocked' to describe a line which is blocked to trains.

EFFECTIVE SITE SAFETY BRIEFINGS

Five Key Steps

- 1 Plan the briefing**
- 2 Know your audience**
- 3 Use a strong delivery style**
- 4 Ask good open questions**
- 5 Be a leader**

TELEPHONE TECHNIQUES – HOW TO DEAL WITH:

A caller who is rambling

- Stop the conversation – BE ASSERTIVE**
- Remind the caller of the purpose of the call**
- Clarify if uncertain**
- Confirm information received**
- Listen to what is being said**

A person who is not following the correct protocols

- Stop the conversation – BE ASSERTIVE**
- Remind the caller of the correct protocols**
- Continue the conversation in a professional way using correct protocols**

LIFE SAVING RULES

Contact with trains



Always have a valid safe system of work in place before going on or near the line.

Working with electricity



Always have a valid permit to work where required.



Always test before applying earths.



Never assume equipment is isolated – always test before touch.

Working at height



Unless it is clear other protection is in place, never work at height without a safety harness.



Always use equipment for working at heights that is fit for purpose.

Working with moving equipment



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

Driving



Always wear a seat belt while in a moving vehicle and always obey the speed limit.



Never use a hand-held device or programme any hands-free device while you are driving a road vehicle.

Taking responsibility



Never undertake an activity unless you have been trained, assessed as competent and have the right equipment.



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

Rail Sentinel

Rail Sentinel website offers the latest developments on the new Sentinel Service.

<http://www.railsentinel.co.uk>

RGS online

RGS online is the website providing free access to all current (many withdrawn) Railway Group Standards, Rail Industry Approved Codes of Practice (RACOPS), Guidance Notes (GNs) and Rail Industry Standards (RISs).

<http://www.rgsonline.co.uk>

RSSB Rail Safety and Standards Board

RSSB provides support and facilitation for a wide range of cross-industry activities.

<http://www.rssb.co.uk>

Safety Central - The site is your one-stop shop of safety information, advice, resources and useful contacts, designed to promote consistency and best practice across the whole rail industry.

<http://safety.networkrail.co.uk/>

There are two ways to report safety concerns. Your first step should be to tell your supervisor or sponsor. If this isn't possible, you can contact CIRAS - the railway's confidential reporting service – www.ciras.org.uk



No matter where you work, reporting a Close Call is vital to improving safety. If you see something with the potential to cause harm raise the alarm on site and make it safe. If it is not safe to continue work then stop. Once the hazard has been removed or made safe then report it. The more data we receive about Close Calls the smarter we can be in preventing accidents nationally.

There are different numbers to call depending on who you work for. Your manager will be able to tell you what the number is for your organisation

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The purpose of this Keypoint Card is to act as a reminder only. If you are unsure about any issue relating to the information given here, you must refer to the appropriate module of the Rule Book GE/RT 8000 Series or Handbook.

In supplying this document, Network Rail makes no warranties, expressed or implied, that compliance with all or any documents it issues is sufficient on its own to check safe systems of work or operation.

Users are reminded of their own duties under health and safety legislation.

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