



# Rule Book

To operate from 5th January 2002  
(Reprinted 24th November 2007)

This Rule Book contains Sections A to Z

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## **REPLACEMENT PAGES**

- the enclosed pages (Issue 11/07) must be inserted in your Rule Book and all existing pages must be discarded
- new or amended items are indicated by a vertical black line in the margin
- a short vertical black line against a space indicates that an item has been deleted
- vertical black lines are not used in Sections Q or Z since these sections are new

## **ELECTRIFIED LINES**

- a new Section is being introduced (see Section Z) concerning electrified lines
- this Section (which is issued separately) is issued to all employees having duties on or near electrified lines
- it replaces, in part, the Electrified Lines Instructions issued by Irish Rail and the instructions concerning such lines in Northern Ireland Railways, Rule Book Appendix 11
- the instructions concerning electrified lines in Section B have been deleted (see Section Z)

## **PERSONAL TRACK SAFETY**

- the definition of walking is amended to apply only when walking ALONE on or near the line
- when two or more persons walk together on or near the line, this must be considered as WORKING and a Track Safety Co-ordinator must be provided (see Section B, clause 2.2)
- this does not, however, affect persons carrying out normal duties in connection with the working of trains, etc

- this is also an alteration in the definition of work which may be undertaken by a TSC when working alone on or near the line (see Section B, clause 6.12.2)
- when work is taking place on vehicles, the Designated Person Responsible for Protection (DP) is now required to wear an armband (see Section B, clause 2.5.1)

### **SIGNAL MAINTENANCE WORK**

- a third circumstance is now introduced when it is permissible for a TSC to request the blockage of a line not under possession in order to safeguard the work without arranging protection under Section T, Part 2
- this applies when signal maintenance work is to take place while the line is closed (for example, overnight) provided the arrangements are shown in the Notice (see Section B, clause 6.7.2)
- the Signalmen's General Instruction No. 11 is being amended accordingly

### **SIGNALS WORKED BY CROSSING KEEPERS**

- clarification is given concerning the meaning of the clearance of a signal protecting a manned level crossing where the signal is worked by the Crossing Keeper over which the Signalman has no control (see Section G, clause 5.1)
- if the Driver is required to pass such a signal at Danger, the provisions of Section D do not apply unless the Driver has also been authorised to pass at Danger the section signal in rear (see Section D, clause 2.3 and Section G, clause 5.2)



## **CONCERNING SECTION H**

- this section now includes the instructions to Drivers and Guards (previously in Section R) concerning the movement of vehicles during engineering work when loading or unloading takes place (see Section H, clauses 3.5.17 and 4.5.13)
- similarly, this Section now includes the instructions to Drivers and Guards (previously in Section T, Part 3) concerning train movements in possessions together with an explanation of possession arrangements (see Section H, clauses 2.10, 3.5.16 and 4.5.12)
- there are no new requirements in any of these clauses except that the Driver must now **PERSONALLY** obtain the Signalman's permission before moving towards or leaving a possession

## **CONCERNING SECTIONS J, K, M AND U**

- the instructions to Signalmen previously in these Sections are transferred (without changed requirements) to the Train Signalling Regulations or Signalmen's General Instructions as follows:
  - Section J, clause 5 becomes SGI 17
  - Section K, clause 4 becomes SGI 6.1
  - Section M, clause 5 is included in Block Regulations 3, 7 and 10 as appropriate
  - Section U, clause 4 becomes SGI 14.3

## **WITHDRAWAL OF SINGLE LINE WORKING (SLW)**

- Signalmen are now required to tell the Pilotman when it is possible for normal working to resume enabling SLW to be withdrawn (see Section N, clauses 2.8, 3.3.1 and 4.3.1)

## **WITHDRAWAL OF WORKING OF SINGLE LINES BY PILOTMAN (WSLP)**

- similarly, Signalmen must advise the Pilotman when it is possible for normal working to resume enabling WSLP to be withdrawn (see Section N, clauses 7.4, 8.3.1 and 9.3.1)
- if the line is to close before the failure necessitating WSLP can be rectified, WSLP must now be withdrawn after the passage of the last train and must be introduced before the passage of the first train after reopening unless the failure has been rectified in the interim or immediately the line reopens (see Section N, clause 7.5 and 9.4)
- normal working must remain suspended in the interim

## **ON-TRACK MACHINES AND ROAD-RAIL VEHICLES**

- a new Section is being introduced (see Section Q) concerning Operators of on-track machines and Persons in Charge of road/rail vehicles
- this replaces instructions in the Irish Rail General Appendix, Section E and Northern Ireland Railways Rule Book, Appendix 8

## **REMOVAL OF PROTECTION BY T-COD OR SIGNAL DISCONNECTION PROVIDED UNDER SECTION T, PART 2**

- authority is now given for this protection to be removed BEFORE the work is completed or stopped if this is necessary for testing purposes, etc
- this is permitted only where all of the conditions specified in Section T, clause 4.4 are met
- attention is drawn to the need for a protecting signal(s) in rear to be controlled to Danger by the Signaller before any work starts where this arrangement may be required and to the need for a Special Authority Number (see clauses 4.3, 5.1, 5.2 6.1 and 6.2)

## ABOUT THIS SUPPLEMENT

- this supplement will be issued to staff during September 2013 and will come into force from 30th September 2013 until further notice

## REPLACEMENT PAGES

- the enclosed pages (Issue 09/13) must be inserted in the correct place in your Rule Book and the existing respective pages must be discarded
- new or amended items are indicated by a vertical black line in the margin
- a short vertical black line against a space indicates that an item has been deleted

**Note:** Where a change is self-explanatory, “Amplification” is used

The key changes to rules in this supplement relate to Section H and Section J in order to clarify when a Shunter is required to accompany a movement

### Section A

- A 3.5 Amplification

### Section G

- G 3.1 bullet point 4 Miniature Stop Light (MSL) added

## Section H

- H 2.2 bullet point 6 Item partly obsolete
- H 2.2 bullet point 7 Amplification
- H 2.9.1 bullet point 2 Renumbering of clause
- H 3.5.1 bullet point 2 Guards to travel in rear cab
- H 3.5.12 New rules to cover unaccompanied shunting movements
- H 3.5.13 to H.3.5.18 Clauses renumbered
- H 4.5.1 bullet point 2 Guards to travel in rear cab
- H 4.5.9 Amplification
- H 4.5.10 to 4.5.14 Clauses renumbered

## Section J

- J 1.0 Amplification
- J 2.1 Loose shunting definition moved to clause 4.4.1
- J 2.2.1 bullet point 3 Amplification
- J 3.2 Existing J 3.2 transferred to Section H
- J 4.4.1 Incorporates definition previously in J 2.1
- J 4.5.1 Handsignals replaced by verbal permission
- J 4.5.2 Handsignals replaced by verbal advice

## Section Z

- Z 2.0 Change to the definition of PICOW with regards to OHLE

### ABOUT THE REVISED SECTION Q: ISSUE 10/16

- The revised Section Q is applicable on both the Iarnród Éireann and Translink Northern Ireland Railways Networks
- The implementation date on the Iarnród Éireann Network for the revised Section Q is the 1<sup>st</sup> January 2018
- The implementation date on the Translink Northern Ireland Railways Network will be advised in the Weekly Operating Notice (WON)
  - From the implementation date the revised Section Q must be inserted in to your Rule Book and the withdrawn Section Q removed and disposed of in a suitable manner
- The revised Section Q is divided into three parts
  - Part 1: Road- Rail Vehicles (RRVs)
  - Part 2: On-Track Machines (OTMs)
  - Part 3: Plant
- An overview of the content and changes to each part of the section is provided below

### SECTION Q PART 1

- Section Q Part One provides general rules to all involved in the management of RRVs
- The rules relating to use of RRVs have been re-worded but the safe working principles have not changed
- Instructions are provided to the person who is controlling and supervising the RRV
  - The term Road Rail Vehicle Controller (RRVC) is used within the rules to describe this person
- Instructions are provided to the person who operates the machine
  - The term Road Rail Vehicle Operator (RRVO) is used within the rules to describe this person
- When an RRVC must be present is set out in detail
- RRVs may still only be used within T3 or T4 arrangements but, there is now a rule allowing RRV to travel from one to the other (This rule is applicable on the Iarnród Éireann Network only)
- The use of trailers is now covered by rules

- RRVs are limited to a maximum speed of 5mph over P&C
- RRVs are limited to a maximum speed of 5mph in a worksite and 20mph outside of worksites
- Instructions are provided on how to control an RRV in rail mode over a CCTV level crossing
- There is a requirement for the RRVO to complete a daily checklist
  - The rules state the checklist must be collected by the RRVC however this requirement is not being implemented on the Iarnród Éireann Network at this time.
- It is now stated that a RRVC can control more than one RRV (Applicable on the Iarnród Éireann Network only)
- A table of terms applicable to Section Q Part One and what they mean is provided

### SECTION Q PART 2

- An OTM is by definition a train, accordingly rules relating to route knowledge, emergencies or train failure have been removed as they are covered elsewhere within the Rule Book
- A table of definitions has been introduced to show the difference between an OTM driver and an OTM operator
- Crewing arrangements have been detailed separately for driving and for operation of OTM
- Rules governing OTM speed within an absolute possession are now provided

### SECTION Q PART 3

- This is a new set of rules to cover machinery or equipment not previously covered by RRV or OTM rules
- Principal rules contained within this part are:
  - The operator of the plant must be competent
  - The track safety co-ordinator must give permission before plant is allowed to work on or near the line
  - Protection must be in place on any line that may be fouled or obstructed by the plant

### RULE BOOK CONTENTS PAGES

- Rule Book Contents Pages 7 and 8 are also amended and reissued

# GLOSSARY

**You must understand these expressions in the Rule Book or in other operating instructions to mean (or include) the following:**

<b>TERM</b>	<b>MEANS (OR INCLUDES)</b>
<b>Absolute Block</b>	A signalling system which allows only one train to be in a Block Section at the same time
<b>Barrow crossing</b>	A crossing (often at the end of a platform) for use by employees. Protection, where provided, is by means of a steady white light
<b>Bi-directional line</b>	A line signalled for train movements in either direction. Includes reversible line (where normally movements take place in one direction though signalling is provided in either direction). Excludes single line
<b>Block Indicator</b>	An instrument which indicates the state of the line between adjacent signal boxes (Absolute Block Lines)
<b>Block Section</b>	The section of line between the section signal of one signal box and the home or outer home signal of the next signal box ahead. This does not apply on Track Circuit Block lines
<b>Catch points</b>	Points provided for derailing a vehicle(s) running back on a gradient in the wrong direction. These points may be unworked if trains pass over the points in one direction only
<b>Cess</b>	The space on either side of the track ballast normally used for drainage



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<b>TERM</b>	<b>MEANS (OR INCLUDES)</b>
<b>Company (the)</b>	Iarnrod Eireann (Irish Rail) or Translink (Northern Ireland Railways) as appropriate
<b>Detection</b>	The proof that points are correctly locked in the NORMAL or REVERSE position. Detection must be achieved before the protecting signal will clear
<b>Detonator</b>	A small disc-shaped device, designed to be placed on the rail head for protection or emergency purposes, which explodes when a train passes over it
<b>Driver</b>	The Driver in charge (who may be a Probationer Driver or Supervisor/Instructor competent in driving duties)
<b>Driver only (or DO) train</b>	A train worked without a Guard
<b>Engineer's train</b>	Includes inspection car or mobile on-track machine
<b>Five foot</b>	The space between the rails
<b>Guard/Driver Communication (GDC)</b>	Guard/Driver Communication system provided by use of a hand-portable radio set working to the train-radio
<b>Ground frame</b>	A control point containing levers or switches to permit local operation of points and, where provided, the associated signals. This local operation is only possible when the controlling signal box gives a release
<b>Home signal (or outer home signal where provided)</b>	The first stop signal on the approach to signal box. This does not apply on Track Circuit Block lines

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<b>TERM</b>	<b>MEANS (OR INCLUDES)</b>
<b>Interlocking Area</b>	Area within which the signalling system is controlled by one interlocking
<b>Level crossing</b>	Any automatic or manned level crossing as defined in Section G
<b>Local Manager</b>	Local Manager currently certificated in Rules and Regulations
<b>Loco-hauled train</b>	Includes push-pull trains irrespective of the position of the locomotive
<b>Notice (the)</b>	Weekly Circular or Weekly Operating Notice
<b>Operations Control</b>	Includes Train Control Centre
<b>Operating Officer</b>	Senior member of the operations organisation responsible for authorising the activity concerned
<b>Overhead Line Equipment (OHLE)</b>	The equipment suspended over the railway line for supplying electricity to electric trains and includes the overhead wires, insulators and any associated equipment
<b>Overlap</b>	The distance ahead of a stop signal up to which the line must be clear before the signal in rear will clear
<b>Permissible speed</b>	The maximum permitted speed as shown in the Working Timetable

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<b>TERM</b>	<b>MEANS (OR INCLUDES)</b>
<b>Pilotman</b>	Person appointed in connection with the passage of trains over a double line during Single Line Working or over a single or bi-directional line during a failure of equipment
<b>Refuge</b>	A space where it is safe to stand when a train passes
<b>Reminder appliance</b>	A device or control used to remind the Signaller that a particular lever, button or control must not be operated or must be used only under certain conditions
<b>Reversible line</b>	See bi-directional line
<b>Section (or signal section)</b>	The line between two consecutive signals
<b>Section signal</b>	A stop signal controlling the entrance to a block section
<b>Shunter</b>	Any person performing shunting duties
<b>Signal box</b>	A signal box or Emergency Control Panel (ECP) which is open
<b>Single line</b>	A line that can be used by movements in either direction
<b>Station</b>	Includes a terminal, depot, halt or yard

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<b>TERM</b>	<b>MEANS (OR INCLUDES)</b>
<b>Station Limits</b>	The line between the home (or outer home) signal and the section signal for the same line, worked from the same signal box. This does not apply on Track Circuit Block lines
<b>Stop signal</b>	Any main signal which can display a stop aspect or indication
<b>Tail lamp</b>	Includes illuminated built-in red light
<b>Token</b>	Includes any single line Token, or Train Staff
<b>Track Circuit</b>	An electric device installed in running rails which detects the presence of a train
<b>Track Circuit Assistor (TCA)</b>	Equipment provided on certain trains to improve the operation of track circuits
<b>Track Circuit Block</b>	A method of signalling trains in a section of line where safety is ensured by the use of track circuits or other means of automatic train absence detection and without the use of block instruments
<b>Track Circuit Operating Device (T-COD)</b>	A device (or clip) which can be placed on the line to provide protection by operating track circuits
<b>Traction unit</b>	Locomotive, multiple unit or self propelled rail vehicle(s) or road/rail vehicle(s) in rail mode
<b>Train</b>	Includes light locomotive(s), self propelled rail-vehicle(s) and road/rail vehicle(s) in rail mode

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<b>TERM</b>	<b>MEANS (OR INCLUDES)</b>
<b>Train-radio</b>	Radio system permanently installed in the cabs of traction units for communicating with signal boxes. Includes portable radio systems where authority is expressly given for use as train-radio
<b>Trap points</b>	Facing points provided at an exit from a siding or converging route used to derail an unauthorised movement, so protecting the adjacent line
<b>Unworked points</b>	Catch or spring points which are not operated from a signal box or ground frame
<b>Worked points</b>	Points which are operated from a signal box or ground frame

Not Used

<b>GLOSSARY Expressions used in the Rule Book or in other Operating Instructions</b>			
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<b>SECTION S Protection and working of hand trolleys and rail-mounted maintenance equipment</b>			
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**SECTION Z Electrified lines**

**NOTE: Section Z (which is published separately) is issued only to employees having duties on or near electrified lines**

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# **SECTION A**

## **EMPLOYMENT AND RULES CONCERNING SAFETY, SECURITY, COMMUNICATIONS AND EMERGENCIES**

## 1.0 EMPLOYMENT

**NOTE:** This Section A applies to all employees

### 1.1 HOURS OF ATTENDANCE

- you must report for work at the time and place required
- you must remain at work during the hours required
- if you cannot report for work because you are ill, you must:
  - arrange for your supervisor to be told immediately
  - provide subsequently any required medical certificates
- you must obtain your supervisor's permission to:
  - be absent from work for any reason except illness, or
  - exchange duties, or
  - alter your hours of attendance

### 1.2 ALCOHOL OR DRUGS

- you must not report for duty if unfit through alcohol or drugs
- you must not consume alcohol or be under the influence of drugs while on duty
- you must not be in possession of any drug of abuse while on the Company's premises
- you must tell your supervisor immediately on reporting for duty if you have been charged with a drink or drugs related criminal offence and you must confirm the details in writing

**NOTE:** reference to drugs includes substance abuse

## 1.0 EMPLOYMENT

### 1.3 OBSERVANCE OF RULES AND INSTRUCTIONS

- you must obey the Rules and Instructions which apply to you and the job you are doing (irrespective of your grade)
- you must also obey the instructions given by those in charge at your place of work
- you must report any infringements of Rules or Instructions to your supervisor

**NOTE:** Rules and Instructions apply irrespective of age or sex

### 1.4 EXAMINATIONS, REPORTS, STATEMENTS, ETC

- you must take any medical, eyesight or vocational examinations required by the Company
- you must give a statement and/or submit a written report and/or attend an Inquiry Board as required

### 1.5 CHANGE OF ADDRESS

- you must tell your supervisor if you change your address or telephone number

### 1.6 UNIFORMS AND PERSONAL PROTECTIVE EQUIPMENT

- when on duty, you must wear the uniform, etc as supplied
- you must also be neat in appearance and not wear emblems or badges not approved by the Company
- you must not dispose of uniforms to anyone outside the Company

## 1.0 EMPLOYMENT

- you must wear protective clothing and equipment where required to do so
- when in a hard hat area, you must wear an approved safety helmet (unless you are in a driving cab, brakevan or similar accommodation)
- you must take care of any Personal Protective Equipment with which you have been supplied and report any loss or damage to your supervisor

## 1.7 DEALING WITH THE PUBLIC

- you must be helpful and courteous to the public
- give your name or staff number if asked
- do not press for tips
- do not look after luggage or articles belonging to the public - these must be deposited in the appropriate office

## 1.8 TRAVELLING IN TRAINS

- you must not travel in a passenger train without a valid ticket or pass, except where your duties require it
- you must not travel in any train or part of a train which is not available for public use without authority to do so

## 1.9 TAKING CARE OF THE COMPANY'S PROPERTY

- you must not lose, waste, damage or misappropriate anything belonging to or held by the Company
- you may be required to make good any loss, however small, the Company suffers as a result

## **1.0 EMPLOYMENT**

- you must not interfere with any railway equipment without proper authority except in an emergency or as specifically provided for in the Rules and Instructions

### **1.10 UNCLAIMED GOODS, MONEY, ETC**

- you have no right to, or interest in, any lost or unclaimed article which is found on the Company's premises or in a rail or road vehicle operated by or for the Company
- if you find any such article, you must hand it over immediately to your supervisor or the Person in Charge at the nearest station

### **1.11 USE OF ELECTRICAL EQUIPMENT NOT BELONGING TO THE COMPANY**

- you must not use a television, radio, personal stereo or similar equipment without specific authority when on duty
- do not connect electrical equipment not belonging to the Company to the mains power supply on its premises without specific authority

### **1.12 MISCELLANEOUS INSTRUCTIONS**

- you must not:
  - have with you any offensive weapon when on duty
  - falsify any report or deliberately enter wrong or misleading information into the correspondence or records of the Company, or be party to any such irregularity
  - misuse or permit someone else to misuse personal travel passes or identity cards
  - allow the Company's name to be associated with any business or social undertaking without permission

## 1.0 EMPLOYMENT

### 1.13 LIMITED MEDICAL FITNESS

- you must comply with any personal medical limitations
- if you are asked to do anything contrary to these limitations, tell the person concerned immediately
- if you are to work for someone other than your usual supervisor(s), tell that person about these limitations before you start work or go on or near the line
- you must wear corrective glasses or contact lenses when you are required to wear these in connection with your railway duties

### 1.14 LEAVING THE COMPANY'S SERVICE

- you must give the notice required by your terms of employment
- when leaving, you must return any uniform, publications or other articles belonging to the Company
- the cost of replacing missing items or repairing damaged items can be deducted from any pay then due or become a debt recoverable at law

## 2.0 SAFETY AND SECURITY

### 2.1 SAFETY TO BE YOUR FIRST CONCERN

- safety must be your first concern
- do not endanger yourself or others
- as far as you can, stop others from endangering themselves
- keep the prevention of accidents or fires in mind at all times

## 2.0 SAFETY AND SECURITY

- remember that reckless exposure of yourself or others to danger is a serious offence against the Company's regulations

## 2.2 SUPPLY OF RULE BOOKS, ETC

- you must ensure that you receive and, where necessary, sign for the relevant Rule Book and other publications, notices and amendments according to your duties

**NOTE: if you have duties on or near electrified lines, you must also receive Section Z (which is issued separately)**

- check with your supervisor if unsure whether you have the correct and current publications
- you are responsible for the care of the publications issued to you
- keep them up to date and insert or make any amendments in the correct place, when issued
- arrange for the replacement of any publication you lose
- produce your publications when requested by your supervisor
- keep those publications with you when on duty as specified in them
- treat all publications as private and not for release to the public
- where notices are exhibited for employees' general information, your booking on duty is taken as an indication that you have read such notices

## 2.0 SAFETY AND SECURITY

### 2.3 ACCESS AND WALKING ROUTES

- you must use only approved points of access to railway premises
- whenever you can, use only approved points of access to the lineside
- use and keep to approved walking routes, where provided

### 2.4 GOING ON OR NEAR THE LINE

- you must not go on or near any railway line unless your duties require it
- "near any railway line" means within 3 metres (or 10 feet) of the nearest rail
- where there is a structure or a permanent fence within that distance from the nearest rail, "near any railway line" means the space between it and the nearest rail

**NOTE:** this instruction does not apply when on a platform or when using a public level crossing

- in addition, you must have been issued with and have with you a current certificate of competence in personal track safety
- in the case of electrified lines, this certificate must be endorsed as valid on electrified lines



## 2.0 SAFETY AND SECURITY

- you do not, however, need a certificate if:
  - you are using an authorised walking route, or
  - you are working in a location where protection is in place in accordance with local instructions to prevent any movement of rail vehicles while personnel are on or near the line and the overhead line equipment (where provided) is isolated, or
  - you are undergoing formal training in personal track safety under the supervision of a properly qualified person, or
  - you have been specially authorised to go on or near the line for a “one-off” visit or inspection under the supervision of a Track Safety Co-ordinator (TSC)
- in an emergency, anyone may go on or near the line to prevent death or injury provided it is safe to do so (and this clause 2.4 does not apply)

## 2.5 GOING ON THE LINESIDE

- you must not go on the lineside unless your duties require it
- "on the lineside" means anywhere between the boundary fence and the point defined above as being "near the line" if you would be in the view of the Drivers of approaching trains or movements
- when on the lineside, you must:
  - wear the approved high visibility clothing, which must be clean and worn correctly
  - obey any warning signs and indications
  - look and listen carefully for approaching trains or movements

## 2.0 SAFETY AND SECURITY

- acknowledge any audible warning from an approaching train by raising one arm above your head
- avoid going on or near the line except as shown in clause 2.4

## 2.6 GETTING IN OR OUT OF PASSENGER VEHICLES NOT IN SERVICE

- you must not enter passenger vehicles not in service unless your duties require it
- make sure you close the doors completely and correctly
- power operated doors must be opened only by a release provided for traincrew use
- internal or external emergency release handles must not be used for this purpose

## 2.7 USING MECHANICAL OR ELECTRICAL PLANT

- you must not use such plant unless:
  - you are authorised to do so
  - you have received any necessary training
  - where appropriate, you hold a current certificate of competence
- if in doubt whether training is needed, check with your supervisor

## 2.8 REPORTING OF ACCIDENTS AND PRESERVATION OF EVIDENCE

- in addition to any emergency action as required in clause 4, all accidents must immediately be reported to:

## 2.0 SAFETY AND SECURITY

- Operations Control
- the Local Manager
- you must not touch, disturb or remove anything which could provide evidence as to the cause of a serious accident unless:
  - essential to prevent continuing danger, or
  - authorised by the Rail Incident Officer
- this specially applies to:
  - driving cab controls
  - signalling equipment and controls
  - vehicle brakes, couplings and running gear
  - items found on the line
- detailed instructions on the preservation of evidence are published elsewhere

## 2.9 TRESPASSERS AND SECURITY

### 2.9.1 What is meant by "trespasser"

- anyone on railway premises where the public are not permitted must be considered as trespassing except for:
  - employees in the course of their duties
  - employees using an authorised route to or from a place of work
  - persons in possession of written authority

## 2.0 SAFETY AND SECURITY

### 2.9.2 What you must do if you encounter trespassers

- obtain names and addresses, if possible
- direct them to leave by the safest route
- warn them against trespassing again
- if a trespasser declines to leave, arrange for the Person in Charge and the Police/Gardai to be informed immediately

### 2.9.3 What you must do if you see anyone behaving suspiciously

- if possible, check whether the person is authorised to be on railway premises
- if you have any doubts, arrange for the Person in Charge and the Police/Gardai to be informed immediately

### 2.9.4 What you must do if you find anything suspicious

- arrange for the Police/Gardai to be called immediately
- do not touch the object
- clear everyone away
- tell the Person in Charge if the object is at a station
- arrange for the passage of trains to be stopped if it is on or near the line or on the lineside
- arrange for the train to be stopped, preferably where passengers can be detrained, if it is in a train

### 2.9.5 Avoid causing concern for security

- do not leave equipment, bags, briefcases, etc unattended where they may cause concern for security

## 3.0 COMMUNICATIONS

### 3.1 BASIC PRINCIPLES

- messages concerning safety must be properly understood by both parties, whether by radio, telephone or face-to-face
- this includes all messages concerning train movements or safety of the line
- you must ensure that:
  - you are speaking to the correct person
  - that person understands correctly who and where you are
  - your message is correctly understood before ending the conversation
- take extra care if you are unfamiliar with the accent or dialect of the person to whom you are speaking

**REMEMBER: MISUNDERSTANDINGS CAN LEAD TO ACCIDENTS**

### 3.2 WHAT YOU MUST DO WHEN USING THE RADIO OR TELEPHONE

- keep the mouthpiece or microphone close, but not too close, to your mouth and speak directly into it
- speak with a natural rhythm, slightly more slowly but at the same volume as in normal conversation

## 3.0 COMMUNICATIONS

- divide the message into short phrases
- use these phrases, when appropriate:
  - “PASS YOUR MESSAGE” rather than “go ahead” or “proceed”
  - “CORRECTION” when needing to correct what has just been said
  - “DISREGARD” when needing to say that previous message is not now applicable
  - “NEGATIVE” meaning “No”, or not correct, or permission not granted
  - “SAY AGAIN FROM” meaning “repeat words from ...”
  - “READ BACK” meaning “repeat the whole message exactly as received”
  - “OVER” meaning the end of my radio transmission - reply expected
  - “OUT” meaning the end of my radio transmission - reply not expected

### 3.3 WHAT YOU MUST DO TO ENSURE YOUR MESSAGE IS PROPERLY UNDERSTOOD

- first, say who you are and where you are
- if you are a Signaller, give the name of the signal box where you are located
- if you are a Driver, give the identity and location of your train
- give your radio call number or telephone number as appropriate

## 3.0 COMMUNICATIONS

- check you are speaking with the correct person at the right place
- give your message clearly, slowly and concisely
- do not use the phrase “not clear” when intending to say that a line is blocked
- ask the person receiving the message to repeat it to you
- do this at the end of the message, or as necessary during the message if it is complicated
- do not assume anything to have been understood until correctly repeated to you

### 3.4 WHAT YOU MUST DO TO ENSURE YOU RECEIVE A MESSAGE CORRECTLY

- when answering the radio or telephone, identify yourself and your location to the caller, as described in the previous clause
- make sure you correctly understand who and where the caller is
- repeat the message to enable the caller to ensure you have correctly understood it

### 3.5 HOW TO IDENTIFY LETTERS AND NUMBERS OR SPELL OUT WORDS

- you must make use of the phonetic alphabet whenever it is necessary to:
  - identify individual letters, or
  - spell out words or place names that are difficult to pronounce or which could be misunderstood

### 3.0 COMMUNICATIONS

- this is particularly important if there is interference or background noise
- the phonetic alphabet is as follows

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

- pronounce numbers singly, e.g. 126 to be given as one-two-six
- pronounce the number '9' as "niner" (two syllables)
- give the figure '0' as "zero" and not "nought"

### 3.6 WHICH MEANS OF COMMUNICATION MUST BE USED

- certain Rules and Instructions specify the use of train-radio or a signal-telephone
- if these are not available because of failure or poor reception etc, you may instead use any readily available alternative means of communication (including a mobile telephone) if:
  - there is an emergency where trains or persons may be endangered, or
  - there is an incident or failure where significant delay or disruption may occur



## 3.0 COMMUNICATIONS

- where the Rules and Instructions do not specify otherwise, you may use any means of communication which is readily available

### 3.7 WHAT YOU MUST DO WHEN USING A MOBILE TELEPHONE

- make sure that the use of a mobile telephone does not cause distraction which could give rise to danger

**NOTE:** this is particularly important when you are on or near the line, in a driving cab or signal box, or at a site or depot where plant or equipment is in use

### 3.8 HOW TO MAKE AN EMERGENCY CALL

- first, say “THIS IS AN EMERGENCY CALL”
- give your name and grade, and say where you are
- say what has happened and exactly where it has happened - use signal numbers or mile posts if possible
- say which emergency services are needed
- give your telephone or radio number
- ask for your message to be repeated
- stay in contact until nothing further is required

## 3.0 COMMUNICATIONS

### 3.9 HOW TO CALL EMERGENCY SERVICES DIRECTLY

- you may use any fixed or mobile telephone with the appropriate facilities for this purpose
- if, however, both are readily available, a fixed telephone should be used
- dial the emergency number which is normally 999 (N.I.) or 112 (R.O.I)
- call separately each emergency service needed
- follow the procedure for making an emergency call

### 3.10 RELAYING A SIGNALMAN'S INSTRUCTIONS TO A DRIVER

- certain Rules specify that the Driver must personally speak with the Signaller when such instructions are given
- in other circumstances, the Signaller is authorised to permit a third party to relay such instructions
- you may, when requested by the Signaller, relay such instructions provided you are acting as:
  - the Guard, or
  - a Shunter, during shunting operations, or
  - Pilotman or Handsignalman, or
  - the Person in Charge at a station, depot or sidings, or
  - a member of Operations Control

## **4.0 ACTION TO BE TAKEN IN EMERGENCIES**

### **4.1 MAKE SURE YOU KNOW HOW TO DEAL WITH AN EMERGENCY - BEFORE IT HAPPENS**

- wherever you are working, make sure you know how to contact the emergency services
- as far as possible, whenever you are working on or near the line, or on the lineside, or at a station, make sure you know how to contact the Signaller

### **4.2 WHAT YOU MUST DO IF EMERGENCY SERVICES ARE REQUIRED**

- call whichever emergency service(s) is needed
- do this as soon as there is any possibility that they may be needed
- use the procedures for making an emergency call, as shown in clause 3

### **4.3 WHAT YOU SHOULD DO IF AN EMERGENCY OCCURS WHICH MAY ENDANGER TRAINS OR PEOPLE**

- stay calm
- contact the Signaller
- say what has happened
- give an accurate description of where the line is blocked
- carry out the instructions given by the Signaller if approaching trains cannot be stopped, but do not endanger yourself

## 4.0 ACTION TO BE TAKEN IN EMERGENCIES

- if unable to contact the Signaller, proceed along the line towards the direction from which trains normally approach
- continue for about 2km (1¼ miles)
- if a train approaches, raise both arms above your head (or use a red flag if available); during darkness, wave any light vigorously (use a red light if available)
- do this so that the Driver of the approaching train will clearly see you, but do not endanger yourself
- alternatively, if unable to contact the Signaller directly, get in touch immediately with any responsible person who will be able to contact the Signaller
- give that person the necessary information and stay in touch until assured your message has reached the Signaller

**NOTE:** this clause 4.3 is intended to give guidance to anyone not trained in emergency protection procedures and/or not in possession of the necessary equipment



Red Flag Stop



No Flag Stop



Any Light by Night

## 4.0 ACTION TO BE TAKEN IN EMERGENCIES

### 4.4 WHAT YOU SHOULD DO IF YOU ARE TRAVELLING ON A TRAIN INVOLVED IN AN ACCIDENT

#### 4.4.1 Remember the first priorities

- to prevent the approach of any other train if danger might arise
- to cut off the traction current (where applicable)
- to ensure the train(s) involved in the accident will make no further movement
- to call the emergency services

#### 4.4.2 How you can help

- if possible, report to the traincrew and give what help you can with the above arrangements
- in particular, you should:
  - make available the first aid, fire fighting and emergency equipment carried on the train
  - be alert for the arrival of emergency services and give them any information which would assist in dealing with the accident
- do not endanger yourself
- you do not need to be passed in Personal Track Safety Rules, but keep clear of the lines as far as possible

## 4.0 ACTION TO BE TAKEN IN EMERGENCIES

### 4.4.3 How to deal with passengers

- try to reassure passengers and give them guidance for their safety
- ask for help from any doctors, nurses, first aiders and other employees of the Company
- use the public address system, if you can
- if they will be safer there, tell passengers to remain in the train for the time being
- evacuate the train only if absolutely necessary, in which case decide which side of the train provides the safer exit and make available the emergency ladders
- tell passengers to:
  - leave the train by the side you have decided is safer
  - be alert for any other train
  - move well clear of all lines and avoid touching any electrical equipment
  - stay in a safe place and wait for further instructions

## 4.5 WHAT YOU SHOULD DO IF YOU BECOME AWARE OF AN OPEN DOOR ON A PASSENGER TRAIN

### 4.5.1 If the door is on a passing train

- contact the Signaller
- explain what you have seen
- give the position in the train of the vehicle concerned as accurately as possible and say on which side

## 4.0 ACTION TO BE TAKEN IN EMERGENCIES

### 4.5.2 If you are travelling on the train concerned

- arrange for the train to be stopped immediately and the traincrew told
- do not try to close the door before the train has stopped
- keep everyone well away until the door can be safely closed

### 4.6 WHAT YOU SHOULD DO IF YOU DISCOVER A FIRE

- make sure that any fire (except controlled burning of lineside vegetation) is extinguished quickly and completely
- get help from anyone nearby but do not endanger yourself
- call the Fire Brigade immediately if you are unable to extinguish the fire quickly
- use fire extinguishers in accordance with the instructions shown
- do not direct water onto live electrical equipment
- any fire, however small, on a moving train can spread rapidly
- on discovering such a fire, you must stop the train immediately unless you are sure you can completely extinguish the fire within a few seconds

**NOTE:** try to avoid stopping the train in an unsuitable place such as a tunnel or viaduct

## 4.0 ACTION TO BE TAKEN IN EMERGENCIES

### 4.7 WHAT YOU SHOULD DO IF THERE IS AN INCIDENT INVOLVING THE OVERHEAD LINE EQUIPMENT ON AN ELECTRIFIED LINE

- if your duties require you to go on or near electrified lines, you must observe the instructions in Section Z with which you are issued
- otherwise, you must take the following basic precautions if an incident occurs:
  - treat the overhead line equipment as being **LIVE** and dangerous to human life
  - keep yourself and anyone nearby at least one metre (three feet) from any part of the equipment which may be **live**
  - this includes anything (or anyone) in contact with the equipment and any broken or displaced wire connected to it, whether hanging or lying on the ground
- if necessary, inform the Person in Charge or Signaller or other responsible person so that arrangements can be made for it to be made safe and anyone endangered to be rescued



# **SECTION B**

## **INSTRUCTIONS TO PERSONS HAVING DUTIES ON OR NEAR THE LINE, OR ON TRAINS OR VEHICLES, OR AT PASSENGER STATIONS**

**PART ONE: GENERAL INSTRUCTIONS TO  
ALL PERSONS**

**PART TWO: ADDITIONAL INSTRUCTIONS TO  
PERSONS WITH SPECIFIC  
RESPONSIBILITIES**

Not Used

# **PART ONE**

## **GENERAL INSTRUCTIONS TO ALL PERSONS**

## 1.0 SAFETY OF TRAINS

### 1.1 HOW YOU CAN HELP PREVENT ACCIDENTS

- when practicable, watch passing trains for signs of anything unsafe
- this includes:
  - a door not properly closed
  - a load not properly secured
  - a vehicle on fire
  - a hot axle box
  - the tail lamps unlit or missing
  - a headlight not illuminated
  - the TRAIN IN DISTRESS signal (a series of long blasts on the horn and/or flashing headlights being exhibited)
  - a hand Danger signal being exhibited
- be alert for anything which may endanger passing trains
- this includes:
  - damage or defect affecting the track
  - a fire, flood or obstruction
  - large animals inside the boundary fence (whether or not it is immediately endangering trains)
  - other animals on or near the line
  - a defect affecting Temporary Speed Restriction equipment

## 1.0 SAFETY OF TRAINS

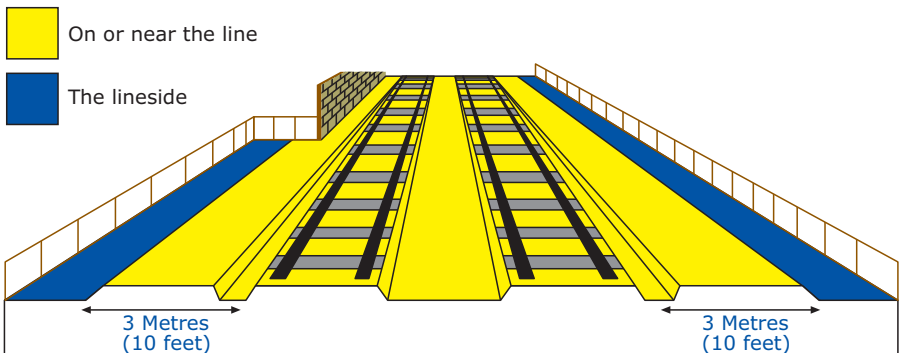
### 1.2 WHAT YOU SHOULD DO IF YOU BECOME AWARE OF ANYTHING UNSAFE

- if you can remove a hazard quickly, do so provided you will not endanger yourself
- otherwise, carry out the emergency procedure for stopping trains as shown in Section A, clause 4
- if you become aware of something which causes you concern for safety but is not of immediate danger, tell the Signaller or Person in Charge as quickly as possible

## 2.0 PERSONAL SAFETY

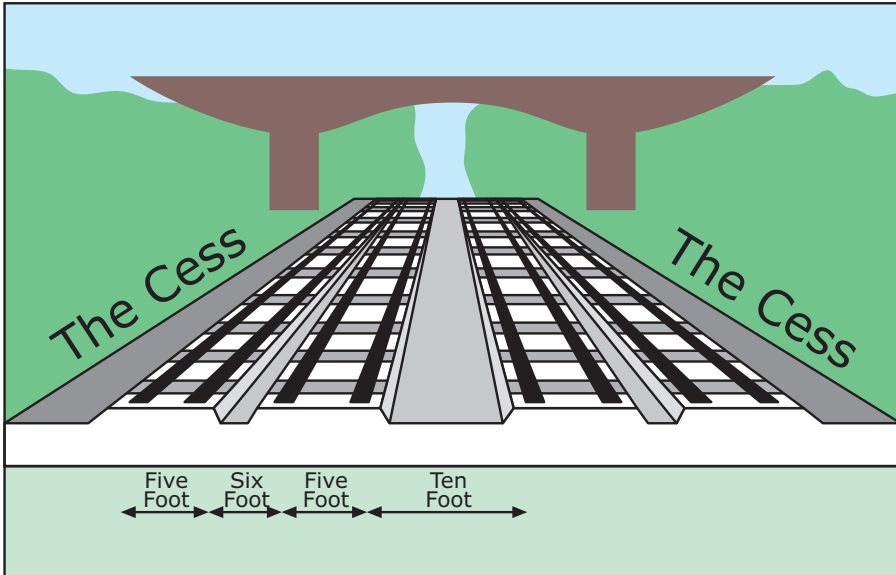
### 2.1 GOING ON OR NEAR THE LINE

DIAGRAM REPRESENTING 'ON OR NEAR THE LINE'  
AND THE LINESIDE



## 2.0 PERSONAL SAFETY

DIAGRAM SHOWING TERMS USED TO DESCRIBE POSITIONS ON OR NEAR THE LINE



### 2.1.1 Authority to go on or near the line

- you must not go on or near the line unless:
  - you are authorised to go there
  - you are competent to go there
  - your duties make it absolutely necessary to go there
- you must use bridges, subways or crossings if this will avoid or reduce the need to go on or near the line

## 2.0 PERSONAL SAFETY

### 2.1.2 What you must wear or use

- you must wear the high visibility clothing provided
- this must be worn correctly and kept clean or replaced if dirty
- use a handlamp, when necessary, during darkness and in tunnels

### 2.1.3 Underfoot conditions

- watch out for obstructions and slippery conditions under-foot
- step over and not on the rails or between points and avoid stepping on sleepers

### 2.1.4 Where there are trains or vehicles

- do not cross the line in front of an approaching train
- do not pass between stationary vehicles (or between stationary vehicles and stop blocks) where the gap is less than 50 metres (50 yards) without first checking that no movement will take place
- do not go in between vehicles unless there is clearly no possibility of a movement taking place

### 2.1.5 When going on or near an electrified line

- the overhead line equipment (OHLE) is electrified at 1,500 volts dc and is dangerous to life
- you must not go on or near an electrified line unless you are competent to do so
- when on or near an electrified line, you must observe the relevant provisions of Section Z (which is issued separately to employees required to go on or near such lines)

## 2.0 PERSONAL SAFETY

### 2.2 RESPONSIBILITY FOR YOUR SAFETY

- whenever you go on or near the line, arrangements must be made to ensure you are not endangered by train movements (including movements in a possession)
- one of two arrangements applies according to the nature of your duties
- for simplicity, these duties are classified as:
  - walking
  - working
- for the purpose of these instructions, WALKING includes:
  - carrying out the normal duties of a Driver, Guard, Signalman, Shunter or Crossing Keeper
  - carrying out other duties involving the working of trains, e.g. Pilotman, Operating Supervisor, etc
  - carrying out handsignalling, points operating or lookout duties or duties involving the placing of protection on the line
  - carrying out any other duties involving walking ALONE on or near the line BUT not at the same time carrying out any form of work activity such as patrolling, examining, inspecting, oiling or cleaning within 2 metres (6 feet 6 inches) of the nearest rail
- whenever you are WALKING on or near the line, you are responsible for your own safety and ensuring you are not endangered by trains
- for the purpose of these instructions, WORKING includes all activities not described above as WALKING



## 2.0 PERSONAL SAFETY

- whenever you are to WORK on or near the line, a TRACK SAFETY CO-ORDINATOR (TSC) must first be appointed
- the TSC is responsible for ensuring you are not endangered by trains

**NOTE:** at certain locations (usually depots or sidings), special instructions are issued allowing work to be done **ONLY** when arrangements have been made to ensure that no unauthorised movements of rail vehicles take place and the overhead line equipment (where provided) is isolated

the instructions concerning the safety of persons **WORKING** on or near the line may be modified accordingly

## 2.3 WHAT YOU MUST DO WHEN WALKING ON OR NEAR THE LINE

### 2.3.1 Basic principle

- you are responsible for your own safety

### 2.3.2 What you must know

- the permissible speed of trains
- the direction(s) they normally approach

### 2.3.3 What you must do

- be alert constantly
- look up frequently
- do not be distracted by anyone nearby

## 2.0 PERSONAL SAFETY

- do not rely on anyone giving warning of approaching trains
- do not rely on signals at Danger or level crossings open to road traffic as an indication that no train is approaching
- do not do, use or wear anything which might affect your seeing or hearing approaching trains
- as far as possible, keep to the "cess" beside all lines and face the direction from which trains normally approach
- do not walk along between the lines unless there is a wide space between them

### 2.3.4 What you must do when a train approaches

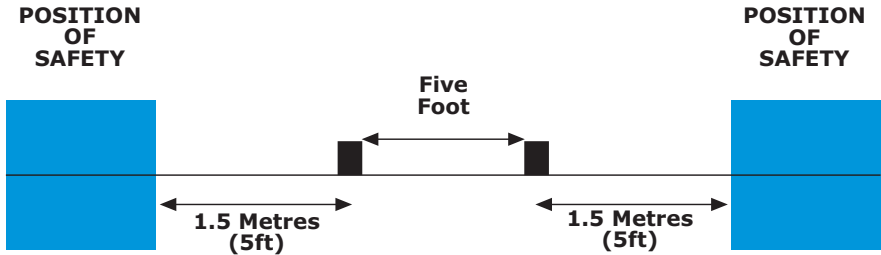
- immediately move clear of all lines unless you are clearly in a position of safety and in no danger from another train approaching unnoticed
- raise your arm above your head to acknowledge the warning horn
- put any equipment you are carrying in a safe place on the ground before the train passes
- stay in a position of safety until the train has passed and you are sure no other train is approaching

**WARNING:**            **never assume an approaching train is on the normal line; always check which line it is on**

## 2.0 PERSONAL SAFETY

### 2.3.5 What you must understand to be a position of safety

- this is a place allowing a clearance of at least 1.5 metres (5 feet) between you (including anything you are wearing or carrying) and the nearest rail of any line on which a train is approaching



### 2.3.6 What you must do if caught between adjacent lines on which trains are approaching

- if you may be unable to reach a position of safety, lie down immediately in the space between the running lines where there are no obstructions
- do not lie down in the five foot

### 2.3.7 What you must do where there are limited clearances

- take extra care where there is limited clearance between the line on which trains may approach and other lines or adjacent structures
- limited clearances may be indicated by a red and white chequered board with the words LIMITED CLEARANCE

## 2.0 PERSONAL SAFETY



- do not stand where there is limited clearance while a train passes
- make sure there is sufficient clearance for your safety when alongside vehicles where lines converge

### 2.3.8 What you must do where TOWS is provided

- make use of the Train Operated Warning System (TOWS) wherever possible
- when the continuous WARNING noise is given, move immediately to a position of safety
- stay there until the SAFE noise is heard
- if NO NOISE is given, you must not go or stay in the controlled area until proper arrangements are made for your safety; if necessary, move clear of the area by the safest means and be alert for approaching trains
- tell the Signaller if the system fails
- be aware that in an emergency or during engineering work, the normal warning time may not be given

## 2.0 PERSONAL SAFETY

- when leaving the controlled area, switch off the system unless others remain nearby - in which case, tell them you are leaving but do not switch off the system

### 2.4 WHAT YOU MUST DO WHEN WORKING ON OR NEAR THE LINE

#### 2.4.1 Requirement for a Track Safety Co-ordinator (TSC)

- you must not work on or near the line unless under the direction of a TSC
- the appointment of a TSC is normally pre-arranged
- if a TSC has not been pre-arranged, you must appoint someone as TSC if you are the senior person in your group
- if certificated as TSC, you may appoint yourself
- whoever acts as TSC must be in possession of a current certificate of competence as TSC, as shown in clause 6.2
- if there are two or more groups at the same location, each must have its own TSC
- no-one other than a TSC is allowed to work alone

#### 2.4.2 Basic principle

- you must comply with the arrangements made by the TSC to ensure your safety

#### 2.4.3 What your TSC will explain before work starts

- your TSC will tell you which system of work is to be adopted to ensure your safety

## 2.0 PERSONAL SAFETY

- if you are to work with lookout protection, the TSC will tell you:
  - who will act as Lookout
  - how the Lookout will give warning
  - where you must go immediately the Lookout gives warning
- if you are to work without lookout protection, the TSC will tell you:
  - on which line(s) movements are stopped
  - whether any line(s) nearby remain open for movements
  - the limits beyond which it will not be safe for you to pass at any time

### 2.4.4 When you may start work

- only when told by your TSC it is safe to do so

### 2.4.5 What you must do during the work

- if lookout protection is provided, you must:
  - stay within the limits specified by your TSC
  - avoid distracting the Lookout
  - immediately acknowledge any warning given by the Lookout by raising your arm above your head and go to the position of safety

## 2.0 PERSONAL SAFETY

- stay there until your TSC tells you it is safe to restart work
- also go immediately to the position of safety if you can no longer see the Lookout or you think a warning may no longer be heard
- tell your TSC what has happened
- if lookout protection is not provided, you must:
  - stay within the limits specified by your TSC
  - keep well clear of any line(s) remaining open to movements
- whichever system applies, you must immediately acknowledge the warning horn of any approaching train even if you are already in a position of safety or well clear

## 2.5 WHAT YOU MUST DO WHEN REQUIRED TO WORK ON RAIL VEHICLES

- these instructions apply if you are required to work:
  - on the outside of a vehicle, or
  - underneath a vehicle, or
  - inside a vehicle, using steps or ladders
- these instructions also apply if you are acting as the Designated Person Responsible for Protection (see below) and are in addition to your specific instructions shown in clause 8
- these instructions do NOT apply if you are a member of the traincrew required to carry out preparation duties or to work on or attend to the outside of a train which has stopped out of course on a running line (see Section H)

## 2.0 PERSONAL SAFETY

### 2.5.1 What you must understand about arrangements to prevent the movement of vehicles

- before work starts, arrangements must be made to prevent the movement of the vehicle(s) concerned on which work is being done
- these arrangements must be made by the DESIGNATED PERSON RESPONSIBLE FOR PROTECTION (DP)
- local instructions specify who must act as DP in each depot
- elsewhere, the Person in Charge of any group or team or anyone required to work alone must act as DP
- if you are required to act as DP, you must:
  - be currently certificated as competent as a DP
  - wear on your left arm a yellow armlet with “DP” in black letters
  - observe the instructions in clause 8 in addition to the instructions in this clause 2.5
- before work starts on the side of any vehicle next to a running line where the distance between the two lines is less than 3 metres (10 feet), a Track Safety Co-ordinator (TSC) must first be appointed
- if competent to do so, the DP may act as TSC

### 2.5.2 What you must do before starting work

- check that the DP has made the necessary arrangements to prevent the movement of the vehicle(s) concerned while work is taking place



## 2.0 PERSONAL SAFETY

- if the work is to take place in a depot, you must also then place a NOT TO BE MOVED board or red flag or red light (steady or flashing) as follows:
  - on the diagonally opposite corners of the vehicle(s) concerned, or
  - at the entrance(s) to the building when the vehicle(s) are completely inside, or
  - as shown in the local instructions
- if you find someone else in the depot is already working on the vehicle(s) concerned, you must, instead, place your identification device on the protection already provided, as shown in the local instructions
- this instruction also applies in a depot if you are required to work as follows:
  - on the outside of vehicles where you may foul the loading gauge of the next siding, or
  - in a siding or pit but not involving working on a vehicle
- in either case, you must observe this instruction except that the flags or lamps must be placed at the entrance(s) to the sidings concerned

### 2.5.3 What you must do during the work

- do not move any vehicle within a siding where protection is provided unless:
  - necessary for your work, AND
  - authorised by the DP

## 2.0 PERSONAL SAFETY

- if you are working on vehicles on the side next to a running line, do not:
  - leave slam doors open, or
  - use planks, steps or long-handled brushes unless authorised in local instructions
- if you are working in an overhead electrified area, you must observe the instructions in Section Z

### 2.5.4 What you must do when work is completed or suspended

- tell the DP when the work is completed or suspended and the vehicles are safe to be moved
- stay in a position of safety or keep well clear
- leave the removal of the protection arrangements entirely to the DP
- if you have been carrying out work in a depot, you must also remove the boards, flags or lamps before telling the DP that work is completed or suspended

**EXCEPTION:**      **if others continue working, you must remove ONLY your identification device; you need not advise the DP**

### 2.5.5 What you must do if there is an irregularity in observing these instructions

- warn anyone who may be endangered to stand well clear
- tell the DP immediately

## **3.0 WORK WHICH MAY AFFECT THE SAFETY OF TRAINS**

### **3.1 BEFORE WORK STARTS**

- you must not start any work which may affect the safety of trains unless authorised by the Person in Charge
- if you are the Person in Charge of any such activity, you must first ensure that the appropriate Rules and Instructions have been observed

### **3.2 EXAMPLES OF WORK WHICH MAY AFFECT THE SAFETY OF TRAINS**

- using a crane or other mechanical equipment which may foul or obstruct the line
- placing a hand trolley on the line
- interfering with any wires, cables or signalling apparatus
- using ladders or equipment which could fall or swing towards the line
- excavating holes or stacking materials close to the line or near a platform edge
- making attachments to any railway structure or equipment such as bridges, station roofs, signal or electrical equipment or their supports
- conveying plant or materials along or across the line
- felling or trimming trees which might fall or roll onto the line
- this list is not exhaustive

## **3.0 WORK WHICH MAY AFFECT THE SAFETY OF TRAINS**

### **3.3 PRECAUTIONS YOU MUST TAKE DURING WORK ON OR NEAR THE LINE**

- during the passage of trains, make sure that all tools and materials which might be struck or moved by the slipstream are well clear and at least 2 metres (6 feet 6 inches) from the nearest rail
- as far as possible, make sure that:
  - tools and material do not obstruct refuges, recesses, walkways or walking routes
  - ballast and other material do not accumulate and affect signalling or level crossing equipment
  - cables are not disturbed
  - flammable materials are kept away from cable runs
  - warning notices concerning high voltage cables and cable markers are not obstructed
  - fire breaks under cable runs are kept clear
  - gates giving access to the lineside are kept closed and, where practicable, locked
  - gates at user worked crossings are closed and any irregularity in this respect is reported
  - lineside fencing is in good repair
  - any defect in the fencing is made good (or temporarily made safe) and the details are reported
- do not place metal tapes, chains or other objects across the rails if they could affect the signalling system

### **3.0 WORK WHICH MAY AFFECT THE SAFETY OF TRAINS**

- when work is finished, do not leave materials on the lineside if they could readily be placed on the line to form an obstruction

### **3.4 INSTRUCTIONS TO PERSONS IN CHARGE OF A CRANE OR OTHER MECHANICAL EQUIPMENT WHICH MAY FOUL THE LINE**

#### **3.4.1 Before starting work**

- you must obtain permission to start work from the person arranging for the line(s) to be blocked

#### **3.4.2 When work is completed, or stopped to enable trains to pass**

- move the crane or equipment well clear of the line and secure it
- tell the person who arranged for the line(s) to be blocked that it is now safe for trains to pass
- do not allow any further movement to take place which may foul the line until you have again obtained permission from the person arranging for the line(s) to be blocked

### **3.5 INSTRUCTIONS TO PERSONS IN CHARGE OF ROAD VEHICLES NEAR THE LINE**

- keep the vehicle, including open doors etc, at least 2 metres (6 feet 6 inches) from any line on which movements may approach
- when turning, keep the back of the vehicle further from the line
- switch off red lights when parked

## **3.0 WORK WHICH MAY AFFECT THE SAFETY OF TRAINS**

### **3.6 INSTRUCTIONS TO PERSONS CARRYING OUT PATROLLING DUTIES**

- you must have with you:
  - at least six detonators
  - a red flag
  - a track circuit operating device on continuously track circuited sections of line
- you must make inspections at the frequency and in the manner laid down in the Departmental Instructions

## **4.0 WORKING WITH TRAINS OR VEHICLES AND WORKING AT PASSENGER STATIONS**

### **4.1 MOVEMENT OF TRACTION UNITS OR VEHICLES**

- you must not move any traction unit under its own power unless:
  - you are passed as competent to drive the type of traction unit concerned, or
  - you are under direct supervision of an authorised instructor
- you must not carry out any Guard's duties or shunting duties (coupling, uncoupling, handsignalling to the Driver, etc) unless you are passed as competent in those duties or undertaking formal training

## **4.0 WORKING WITH TRAINS OR VEHICLES AND WORKING AT PASSENGER STATIONS**

### **4.2 GETTING ON OR OFF MOVING VEHICLES**

- do not get off any moving vehicle
- do not get on any moving vehicle unless absolutely necessary and then only provided the vehicle is at a platform and it is safe to do so
- do not ride on the step of any vehicle

### **4.3 WORKING WITH ENGINEER'S TRAINS OR HAND TROLLEYS**

- do not stay in a vehicle which is to be moved unless there is no risk of being thrown over or falling off
- do not ride on a hand trolley
- you may ride in the driving cab of an Engineer's train proceeding towards, on or from a line under possession ONLY when authorised by either:
  - the Person in Charge of the Possession (PICOP), or
  - the Engineering Supervisor (ES) in charge of a work site
- you must give the Driver any necessary information concerning the location of the work or the protection arrangements
- before an Engineer's train leaves a work site, make sure that:
  - any ballast or stone, etc, is removed from the underframes
  - any loose chains, strings, straps or sheets are secured
- these precautions are necessary to prevent risk of damage or injury

## 4.0 WORKING WITH TRAINS OR VEHICLES AND WORKING AT PASSENGER STATIONS

### 4.4 USE OF DETONATORS AND TRACK CIRCUIT OPERATING DEVICES

#### 4.4.1 Detonators

- handle detonators carefully
- when using detonators, you must:
  - place them on the centre of the rail and secure them properly
  - keep at least 30 metres (30 yards) away if a train is to pass over them
  - tell anyone nearby to keep that distance away
  - take care at stations or level crossings to ensure no-one is injured by flying fragments
- you are responsible for the safe-keeping and replacement of detonators issued for your personal use
- you must examine any detonators issued to you or for which you are responsible during the first week of March and September and any which are over five years old must be handed in and replaced
- you must report the circumstances and hand in any detonators (or fragments) and others in the same packet if:
  - a detonator fails to explode, or
  - a detonator shows signs of rust, damage or decay, or
  - flying fragments cause injury



## 4.0 WORKING WITH TRAINS OR VEHICLES AND WORKING AT PASSENGER STATIONS

### 4.4.2 Track Circuit Operating Devices

- when using a track circuit operating device (T-COD), you must apply it to the line as shown in the instructions for the type of T-COD concerned
- if the T-COD fails to operate correctly, you must:
  - check whether it is correctly applied to the line
  - if so, treat the T-COD as defective, and take it out of use and hand it in together with a full report of the circumstances
  - if not, remove the T-COD and re-apply it to the line
- in the case of a spring-clip type T-COD, this must be taken out of use immediately after being removed from the line (whether or not it has operated correctly) and must not be re-used

## 4.0 WORKING WITH TRAINS OR VEHICLES AND WORKING AT PASSENGER STATIONS

### 4.5 GIVING HANDSIGNALS

- during daylight in good visibility, you must give handsignals by means of a flag or, where authorised, by the raising or movement of your arms
- at all other times, you must use a handlamp for this purpose
- make sure that any handsignal you give is clear and prominent
- ensure it is acted upon ONLY by the person you intend
- hold the flag or lamp STEADILY except where the Rules specify otherwise
- do not place it on the ground unless it is to indicate:
  - an obstruction, or
  - vehicle(s) not to be moved, or
  - points secured for Single Line Working
- when giving a handsignal from a signal box, you must ensure that the flag or lamp is held outside the signal box

**IMPORTANT:** do not give a handsignal which might inadvertently conflict with the Danger aspect of a stop signal nearby - this might lead a Driver into passing the signal at Danger without authority

## **4.0 WORKING WITH TRAINS OR VEHICLES AND WORKING AT PASSENGER STATIONS**

### **4.6 PROTECTION BY MAINTAINING SIGNALS AT DANGER**

- you must understand that where a signal is maintained at Danger to provide protection (for whatever reason), the signal may be cleared for an unaffected route provided it is safe to do so

### **4.7 SIGNAL POST REPLACEMENT SWITCHES**

- these switches are operated to the required position by a key which is issued to certain staff
- if issued with a key, you may use a signal post replacement switch to place or maintain a signal at Danger in accordance with the Rules
- after placing a signal to Danger, you must check that it displays a red aspect
- tell the Signaller when the switch has been operated to RED and before restoring it to AUTO

### **4.8 LABELLING OF DEFECTIVE VEHICLES**

- the Maintenance staff are required to place appropriate labels on vehicles needing repairs
- unless you are a member of the Maintenance staff who is authorised to do so, you must not remove or obscure any such label

## 4.0 WORKING WITH TRAINS OR VEHICLES AND WORKING AT PASSENGER STATIONS

### 4.9 SAFETY AT PASSENGER STATIONS

- make sure that platforms (and other areas to which the public is admitted) are kept safe
- take particular care to prevent passengers endangering themselves when trains arrive or depart and when they pass at speed
- make sure that nothing is likely to fall onto the line
- do not leave station equipment, parcels or luggage, etc within 2 metres (6ft 6 inches) of the platform edge
- unattended trolleys and mobile station equipment must be secured and any keys removed
- do not operate any powered equipment unless you are competent to do so or being trained by an authorised person

**NOTE:** such training must be done well away from any line on which trains may approach and away from areas to which the public has access

- when using powered equipment, you must not endanger the public or allow anyone to ride on it unless designed for that purpose
- if anything falls from a platform which may endanger trains, you must treat this as an emergency as shown in Section A, clause 4.3

## 4.0 WORKING WITH TRAINS OR VEHICLES AND WORKING AT PASSENGER STATIONS

### 4.10 PASSENGERS GETTING IN OR OUT OF TRAINS

- do not open a door to allow a passenger to get in or out of a moving train
- warn any passenger attempting to do this
- warn passengers if the train stops with some coaches not at the platform
- tell passengers whether to move along the train or wait until it has moved forward

**NOTES: (a) platform staff must assist with the closing of doors when a train is due to leave**

**(b) the necessary handsignals to start the train from the platform must be given by the Person in Charge (as shown in Section H)**

### 4.11 USE OF BARROW CROSSINGS

- you must obtain the Signalman's permission before taking any trolley, etc over a barrow crossing if there is any possibility of the wheels becoming trapped
- do this whether or not warning lights are provided
- tell the Signalman immediately the trolley is clear of the crossing

## 5.0 TRAVELLING IN TRAINS

### 5.1 GENERAL INSTRUCTIONS

- no-one is allowed to travel in ANY part of ANY train unless:
  - in possession of a permit to do so, or
  - in accordance with this clause 5
- if you are a Person in Charge of a station (or authorised member of that person's staff), you may travel in any part of any train when going to or from an emergency or incident
- if you are a trainman, you may travel in any part of any train when required to travel on duty, but you must not travel in the driving cab from which the train is driven

### 5.2 TRAVELLING IN DRIVING CABS

- no-one is allowed to travel in any driving cab apart from the Driver in charge, except:
  - anyone carrying out duties which specifically require them to accompany the Driver in accordance with the Rules
  - a Driver during road learning duties
  - a Shunter during shunting operations
  - a person required to travel by Engineer's train to or from a work site in a possession (but only on the authority of the Person in Charge of the Possession or Engineering Supervisor)

**NOTE:** you must not travel in the driving cab from which an Engineer's train is being driven unless expressly required to instruct the Driver concerning the movement

- persons as authorised in clause 5.1

## **5.0 TRAVELLING IN TRAINS**

### **5.3 TRAVELLING IN BRAKE COMPARTMENTS OR BRAKE VANS**

- no-one is allowed to travel in any brake compartment or brake van apart from the Guard in charge, except:
  - a Shunter during shunting operations
  - a person authorised to operate a catering trolley on the train
  - persons as authorised in clause 5.1

### **5.4 TRAVELLING IN PASSENGER ACCOMMODATION ON PASSENGER TRAINS**

- no one is allowed to travel in such accommodation except:
  - holders of a valid ticket or pass
  - persons as authorised in clause 5.1

### **5.5 TRAVELLING IN EMPTY COACHING STOCK TRAINS**

- no-one is allowed to travel in such trains except:
  - the Guard in charge
  - an employee on duty or travelling to or from duty provided authority is given by the Local Manager
  - persons as authorised in clause 5.1
- on a D.O. train, the following instructions also apply:
  - the employees concerned must be in possession of a current certificate of competence in personal track safety

## **5.0 TRAVELLING IN TRAINS**

- before starting, one of the group (who must take charge) must tell the Driver the number of employees and their destination(s)
- everyone must obey any instructions given by the Driver and not alight at other than their destination except in emergency
- non-railway personnel must not be conveyed under this arrangement

## **5.6 WHAT YOU MUST DO WHEN PERMITTED TO RIDE IN THE CAB FROM WHICH THE TRAIN IS DRIVEN**

- avoid distracting the Driver
- make sure not to exceed a MAXIMUM of three persons (including the Driver) in the cab unless specially authorised by the Company's official who issues cab passes



# **PART TWO**

## **ADDITIONAL INSTRUCTIONS TO PERSONS WITH SPECIFIC RESPONSIBILITIES**

**Section B, Part 2****Weekly Circular Amendment Record**

Any amendment to this Section B, part 2 issued via a Weekly Circular Notice will be recorded in the table below and displayed until the respective Rule Book pages are issued.

<b>WC No.</b>	<b>WE date</b>	<b>Description of Amendment</b>
3418	12.09.10	Introduction of and instructions for new role, SE&T Work Protector. Notice to be retained After page B72.

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

### 6.1 YOUR RESPONSIBILITY

- to make arrangements to prevent anyone in your group being endangered by trains

**NOTE:** reference to “trains” in this clause 6 includes movements including in sidings or possessions

### 6.2 WHEN YOU MAY ACT AS TSC

- when pre-arranged
- when appointed by the senior person in your group if not pre-arranged
- in either case, you must be in possession of a current certificate of competence in TSC duties
- if your certificate is endorsed “SOLO”, you may work alone on or near the line as shown in clause 6.12, but you are not permitted to act as TSC for a group

### 6.3 HOW YOU ARE IDENTIFIED AS TSC

- wear on your left arm a white armband with "TSC" in blue letters
- tell everyone in your group that you are the TSC before anyone goes on or near the line
- stay with your group until the work is completed and everyone is clear of the line or until you are relieved by another TSC
- if relieved, point out immediately to everyone in your group who is the new TSC and remove your armband

## **6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS**

### **6.4 WHAT YOU MUST KNOW ABOUT YOUR SITE OF WORK**

- the approved access points
- the most suitable means of contacting the Signaller and the emergency services
- the permissible speed of trains
- the directions trains normally approach
- whether the line is signalled for trains in either direction
- whether there is overhead line equipment
- whether there are local hazards or conditions which may affect your system of work

### **6.5 WHAT YOU MUST ENSURE ABOUT YOUR SYSTEM OF WORK**

- you must select a system of work which will ensure that no-one in your group is endangered by trains
- you must ensure everyone in your group is briefed and understands the system before work starts
- you must STOP WORK and move everyone to a position of safety IMMEDIATELY there is any doubt whether work may safely continue
- you must alter the system of work whenever changed conditions or circumstances make this necessary and everyone must understand the new arrangements before restarting work
- you must arrange for the Train Operated Warning System (TOWS) to be used whenever practicable

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

### 6.6 HOW TO SELECT A SAFE SYSTEM OF WORK

#### 6.6.1 Basic principle

- a colour coding system applies at all sites of work on or near the line
- these are known as GREEN zones or RED zones
- whenever practicable, you must arrange for your group to work only in a GREEN zone
- a GREEN zone is the safest way of working

#### 6.6.2 Requirements for a GREEN zone

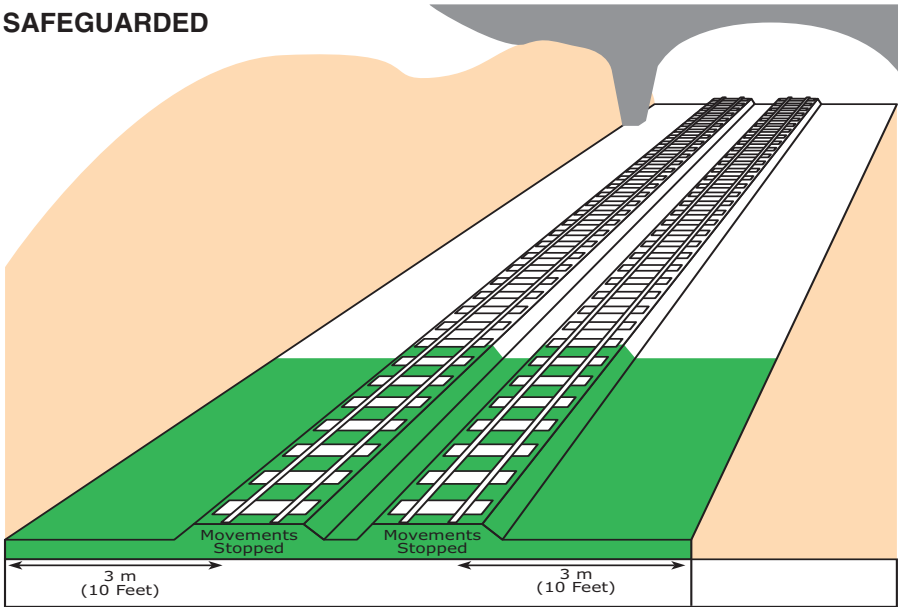
- a GREEN zone is where you arrange for the work to take place without anyone in your group going on or near any line or siding, including in a possession, on which trains (or movements) may pass

#### 6.6.3 How to arrange a GREEN zone

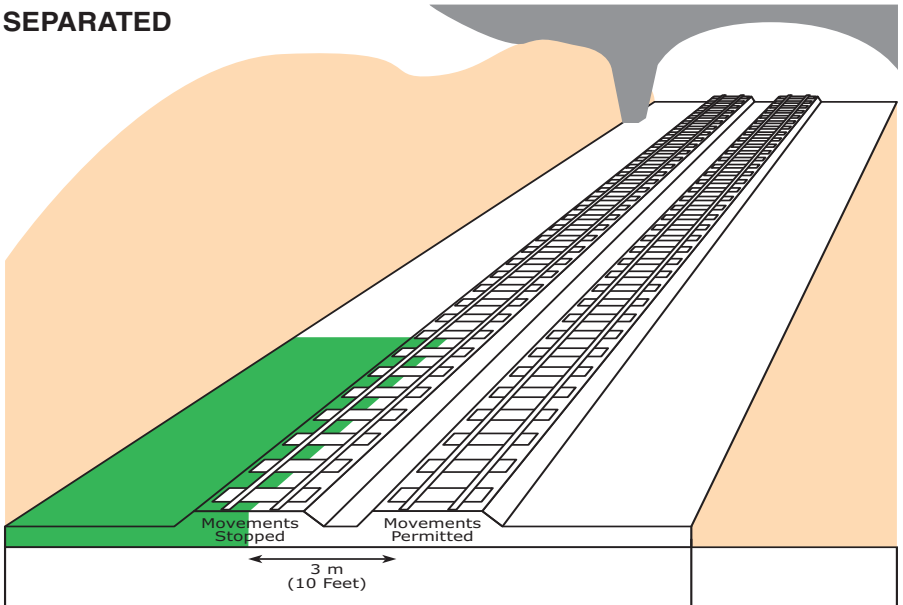
- to set up a GREEN zone, you must arrange for your site of work to be either:
  - SAFEGUARDED by stopping trains on all lines, or
  - SEPARATED from the nearest line open to trains, by a distance of at least 3 metres (10 feet), or
  - FENCED from the nearest line open to trains where one or more lines remains open to trains

# 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

## SAFEGUARDED

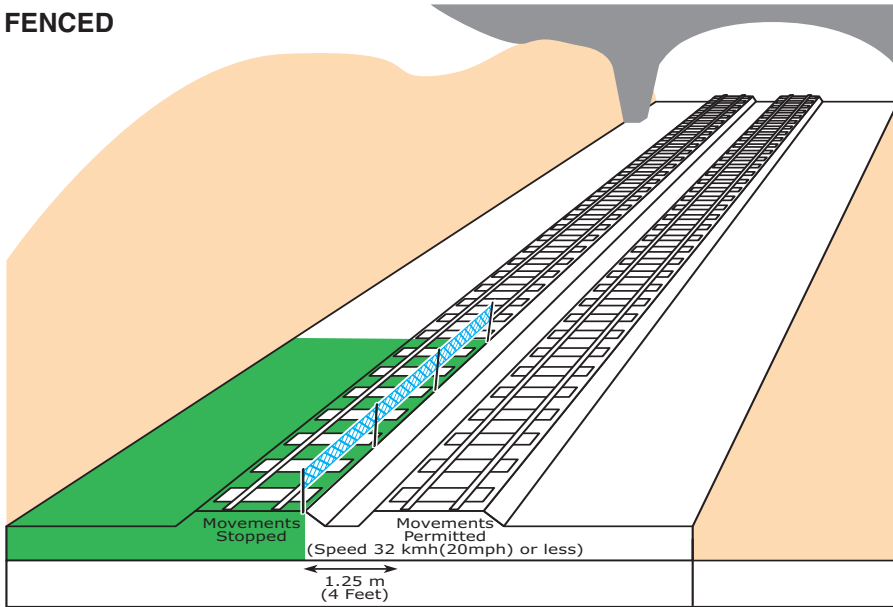


## SEPARATED



## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

### FENCED



- when it is necessary to block one or more lines to trains, clauses 6.7 or 6.8 apply
- when it is necessary to maintain a separation distance, clause 6.9 applies
- when it is necessary to provide fencing, clause 6.10 applies

**NOTE:** you may need to apply a combination of these requirements

## **6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS**

### **6.6.4 If unable to arrange a GREEN zone**

- your group will be considered to be working in a RED zone

### **6.6.5 When you are allowed to arrange a RED zone**

- you may allow your group to work in a RED zone ONLY if:
  - absolutely necessary and it is not practicable to arrange a GREEN zone, AND
  - lookout protection can be provided to give sufficient warning of all trains on the line(s) concerned
- when it is necessary to arrange lookout protection, clause 6.11 applies

### **6.6.6 When work on or near the line is not allowed**

- you must not permit work to take place if:
  - you are unable to set up a GREEN zone, AND
  - you are unable to arrange adequate lookout protection to enable work to be done safely in a RED zone

## **6.7 HOW TO ARRANGE A SAFE SYSTEM OF WORK ON OR NEAR A LINE WHICH IS NOT UNDER POSSESSION**

### **6.7.1 Basic principle**

- whenever practicable, you must set up a GREEN zone by arranging for trains to be stopped on all lines



## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

- if, however, an adjacent line(s) is to remain open to trains, you must ensure that a suitable separation distance (as shown in clause 6.9) or fencing (as shown in clause 6.10) is provided
- if it is not possible to make these arrangements your site of work must comply with the requirements for a RED zone (as shown in clause 6.11)

### 6.7.2 Method you must use to block the line

- this must be done in accordance with Section T, Part 2 (Part 4, in the case of a siding), unless:
  - the Signalman requires work to be done on or near the line and you consider that this cannot be done safely with trains running on the line(s) concerned, or
  - work is to be done on the outside of a train stopped on a running line because of a failure or exceptional incident and you consider that this cannot be done safely with trains running on the adjacent line, or
  - maintenance work on signalling equipment is to be carried out while the line is closed and details of this arrangement are published in the Notice
- if any of these circumstances applies, you must personally speak with the Signalman before starting work and obtain an assurance that:
  - the passage of trains is stopped on the line(s) concerned
  - movements will not be resumed without your authority
- you must also check with the Signalman whether any other line(s) remain open to trains
- if necessary, you may have to delay starting (or restarting) work until the Signalman can find a suitable margin

## **6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS**

### **6.7.3 What you must do before work starts**

- tell everyone in your group:
  - on which line(s) trains are stopped
  - whether any line(s) nearby remains open for trains
  - the limits beyond which no-one must go

### **6.7.4 What you must do during the work**

- make sure no-one passes beyond the limits you have specified

## **6.8 HOW TO ARRANGE A SAFE SYSTEM OF WORK ON OR NEAR A LINE UNDER POSSESSION**

### **6.8.1 Basic principle**

- if your group is to work WITHIN a work site in a possession, you must, whenever practicable, set up a GREEN zone by making the necessary arrangements with the Engineering Supervisor (as shown in this clause 6.8) and the arrangements shown in clause 6.9 or 6.10, as appropriate
- if it is not possible to make these arrangements, or your group is to work OUTSIDE a work site in a possession, your site of work must comply with the requirements for a RED zone (as shown in clause 6.11)

### **6.8.2 Arrangements you must make with the Engineering Supervisor (ES)**

- before work starts, you must sign the Engineering Supervisor's Certificate (Part E) (see page T58)

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

**NOTE:** you must instead sign Part C if you are acting as ES and TSC

- this ensures the work site arrangements are not given without your knowledge
- you must then obtain the agreement of the ES that no movements will take place within the work site (except as shown in clause 6.8.3) in order that you can comply with the requirements for a GREEN zone
- if you are unable to make this arrangement with the ES, your site of work must comply with the requirements for a RED zone
- whichever zone working applies, you must sign this certificate again when your work is finished
- if your work is to continue after the ES has given up the work site, you must also sign this certificate
- before doing so, you must arrange another system of work so that no-one will be endangered by trains at linespeed

### 6.8.3 Movement of rail-mounted equipment within a GREEN zone

- normally, no rail movement is permitted in a GREEN zone
- however, movements of rail-mounted plant or on-track machines may take place within a work site where you have set up a GREEN zone, provided:
  - you reach a clear understanding with the ES as to what is required
  - you ensure that no-one is endangered

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

- the movements are made at extreme caution, not exceeding walking pace
- you must liaise with any other TSC at the work site

### 6.8.4 What you must do before work starts

- tell everyone in your group:
  - on which line(s) trains are stopped
  - whether any line(s) nearby remains open for trains
  - the limits beyond which no-one must go
- say whether movements of rail-mounted plant or on-track machines may take place on any line within the GREEN zone

## 6.9 HOW TO ARRANGE A SEPARATION DISTANCE

### 6.9.1 Basic principle

- where one or more lines are blocked to trains and your group is to work near a line remaining open to trains, you must specify the limit beyond which no-one must go
- this limit must be at least 3 metres (10 feet) from the nearest line open to trains
- this clause 6.9 does not apply where you arrange fencing (as shown in clause 6.10)

### 6.9.2 What you must do before work starts

- tell everyone in your group the limit beyond which no-one must go at any time

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

- when possible, specify a physical feature on the ground corresponding with this limit

### 6.9.3 What you must do during the work

- watch for anyone who strays beyond the limit
- warn anyone immediately who does so
- remind your group of the limit whenever anyone has strayed beyond it
- do this whether or not a train is approaching

## 6.10 HOW TO ARRANGE THE PROVISION OF FENCING

### 6.10.1 Basic principle

- if your group is to work near a line remaining open to trains, you must ensure that a fence is provided to form an effective barrier to remind anyone straying towards the line open to trains
- this clause 6.10 does not apply where you arrange a separation distance (as shown in clause 6.9)

### 6.10.2 Use of permanent fencing

- you may rely on a permanent fence (such as provided at lineside equipment) where this is conveniently located and suitable for the purpose

### 6.10.3 Requirements for temporary fencing

- it must be positioned at least 2 metres (6 feet 6 inches) from the nearest line open to trains

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

**EXCEPTION:** this distance may be reduced to 1.25 metres (4 feet) where a permanent or temporary speed restriction not exceeding 32 kmh (20 mph) applies on the nearest line

- it must be about one metre (3 feet) high
- it must extend for the whole length of the site of work and be continuous (except where access is needed)
- it must comprise light blue plastic netted sheeting

### 6.10.4 What you must do before work starts

- check that the fencing is correctly and securely positioned
- make sure everyone in your group knows which is the safe side

## 6.11 HOW TO ARRANGE LOOKOUT PROTECTION

### 6.11.1 Basic principle

- whenever it is necessary to set up a RED zone, you must arrange for lookout protection so that your group will have sufficient warning to enable everyone to reach a position of safety at least 10 seconds before the arrival of a train
- you must decide the number and position of Lookouts according to:
  - the warning TIME needed for the work
  - the SPEED of approaching trains
  - the DISTANCE at which approaching trains can be seen

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

### 6.11.2 How to decide the warning time needed for the work

- this is the minimum TIME needed for everyone in the group to:
  - become aware of the approach of any train
  - stop work
  - remove any tools or equipment which may cause danger
  - reach a position of safety
- this TIME is determined by:
  - the means by which those who will be working become aware of approaching trains
  - the nature of the work and the tools and equipment to be used
  - the number and experience of those who will be working
  - the location of the position of safety and whether there are limited clearances
  - visibility
  - weather conditions
  - underfoot conditions
  - noise which will be created by the work or any background noise
- you must consider the minimum warning TIME for tasks of a minor nature to be 15 seconds and for all other work to be 25 seconds
  - you must increase either figure as necessary according to the circumstances listed above

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

- you must use the longest warning TIME required where the tasks of your group require different warning TIMES

### 6.11.3 How to ascertain the speed of approaching trains

- this must be considered as the permissible SPEED of trains
- do not rely on:
  - signals at Danger or Caution
  - level crossings being open to road users
  - trains stopping at stations
  - temporary or emergency speed restrictions, unless imposed in connection with the work concerned
- you must assume trains will approach at the normal permissible SPEED on a line under possession unless:
  - your group is to work within a work site on or near a line under possession, AND
  - you have first signed the Engineering Supervisor's certificate

### 6.11.4 How to assess the distance at which approaching trains can be seen

- you must identify the DISTANCE from the site of work at which approaching trains will be clearly seen
- take great care not to over-estimate this DISTANCE
- where necessary, use mileposts and other known distances to check your assessment



## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

### 6.11.5 How to decide the number and position of lookouts

- take into account the three factors of TIME, SPEED and DISTANCE as described above
- use the Sighting Distance Chart (see page B51) as necessary
- position one or more Lookouts so that adequate warning will be given to your group
- arrange lookout protection in respect of movements in either direction on:
  - a single line, or
  - a line on which train movements may pass in either direction, or
  - a line on which Single Line Working applies

### 6.11.6 What you must do where the work is on or near a line under possession

- before arranging lookout protection in respect of movements within a work site, you must sign the Engineering Supervisor's Certificate
- this ensures the work site arrangements are not given up without your knowledge
- you must also sign this certificate when the work is completed
- if your work is to continue after the ES has given up the work site, you must also sign this certificate, but not until you have altered the lookout arrangements so that no-one will be endangered by trains at linespeed

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

- when arranging lookout protection in respect of movements within the possession but OUTSIDE a work site, you must understand the possession may be given up without warning - do not rely on the arrangements for the possession

### 6.11.7 What you must do where there is noise from mechanical plant or other sources

- you must arrange for touch warning to be provided or for the warning device provided with the plant to be used
- do not permit warning by touch in place of a failed warning device on the plant

### 6.11.8 What you must do where there are two or more groups

- you must agree the arrangements with the other TSC(s) if two (or more) groups are to share lookout protection
- make sure the Lookout understands who is to be protected
- point out to everyone in your group who is the Lookout

### 6.11.9 What you must do if the work takes place during fog or falling snow

- before allowing work to start or continue during fog or falling snow, you must arrange for:
  - the line(s) concerned to be blocked to all movements, or
  - an Emergency Speed Restriction to be imposed to ensure that sufficient warning of approaching trains can be obtained by the Lookout

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

### 6.11.10 What you must do before work starts

- check that the Lookout is:
  - in possession of a current certificate of competence as Lookout and is competent to operate any special equipment to be used
  - wearing a LOOKOUT armband and is properly equipped
- tell everyone in your group:
  - that lookout protection is being provided
  - the means by which warning will be given
  - the position of safety to which each must then go
- arrange for a warning to be given to check if it is effective
- do not permit work to start (or restart after the passage of a train) until it is safe to do so

### 6.11.11 What you must ensure during the work

- the Lookout must not be distracted nor take any part in the work
- you must not act as Lookout

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

### SIGHTING DISTANCE CHART (IN METRES)

Permissible Speed (M.P.H.)	SIGHTING DISTANCES IN METRES TO PROVIDE MINIMUM WARNING TIME						
	15 sec	20 sec	25 sec	30 sec	35 sec	40 sec	45 sec
100	700	900	1200	1400	1600	1800	2100
90	700	900	1100	1300	1500	1700	1900
75	600	700	900	1100	1200	1400	1600
60	500	600	700	900	1000	1100	1300
40	300	400	500	600	700	800	900
20	200	200	300	300	400	400	400

### SIGHTING DISTANCE CHART (IN MILES)

Permissible Speed (M.P.H.)	SIGHTING DISTANCES IN MILES TO PROVIDE MINIMUM WARNING TIME						
	15 sec	20 sec	25 sec	30 sec	35 sec	40 sec	45 sec
100	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1 \frac{1}{8}$	$1 \frac{1}{4}$
90	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1	$1 \frac{1}{8}$
75	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{7}{8}$	1
60	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{4}$	$\frac{3}{4}$
40	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
20	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$

Example: if permissible speed is 90 mph and the minimum warning time required is 25 seconds, the Lookout must be able to see an approaching train at 1100 metres ( $\frac{5}{8}$  mile) in order to give adequate warning

## 6.0 INSTRUCTIONS TO TRACK SAFETY CO-ORDINATORS

### 6.12 WHAT YOU MUST DO WHEN WORKING ALONE

#### 6.12.1 Basic principle

- you are responsible for your own safety

#### 6.12.2 When it is safe for you to work alone

- you may work alone provided:
  - the work involves only patrolling, examining or inspecting, or work of a minor nature as authorised in the Departmental Instructions
  - you will be able to remain sufficiently alert for the approach of trains and be able to reach a position of safety at least 10 seconds before a train arrives
- alternatively, you must arrange for the line(s) concerned to be blocked to all movements

**EXCEPTION:** provided you are clearly in a position of safety, you may work alone without restriction as to the nature of the work

#### 6.12.3 What you must do during the work

- be alert constantly
- look up frequently
- avoid allowing the work you are doing, or anything else, to affect your seeing or hearing approaching trains
- you need not wear a TSC armband

## 7.0 INSTRUCTIONS TO LOOKOUTS

### 7.1 YOUR RESPONSIBILITY

- to provide a prompt warning of each approaching train as required by your TSC

### 7.2 WHEN YOU MAY ACT AS LOOKOUT

- ONLY if you are currently certificated as competent as Lookout and ONLY on the instruction of your TSC

### 7.3 WHAT EQUIPMENT YOU MUST HAVE WITH YOU

- your current certificate of competence as a Lookout
- a whistle or horn
- at least six detonators
- a red flag, during daylight
- if necessary, a blue and white flag during daylight
- a handlamp during darkness, poor visibility or in a tunnel
- a LOOKOUT armband, which you must wear on the left arm

### 7.4 WHAT YOU MUST CHECK WITH YOUR TSC BEFORE STARTING LOOKOUT DUTIES

- who you will be protecting
- where they will be working
- on which line(s) warning is required
- when and how you must give a warning
- where is the position of safety to which the group must go

## 7.0 INSTRUCTIONS TO LOOKOUTS

### 7.5 WHAT YOU MUST DO WHEN ACTING AS LOOKOUT

- remain in the position specified by your TSC
- be alert constantly for approaching trains
- avoid distraction
- take no part in the work

### 7.6 WHAT YOU MUST DO WHEN A TRAIN APPROACHES

- immediately sound your whistle or horn
- if necessary, shout as well
- make sure everyone being protected immediately raises an arm above the head and moves to a position of safety
- if anyone does not do this, sound your whistle or horn again - this time with a series of short, sharp blasts (and shout, if necessary) until everyone is clear
- if you are required to give warning by touch, do this immediately a train approaches
- repeat this warning if anyone does not move clear

### 7.7 WHAT YOU MUST DO WHEN A TRAIN APPROACHES WHILE YOU ARE ACTING AS DISTANT LOOKOUT

- immediately wave your blue and white chequered flag slowly from side to side above your head
- do this until the Site Lookout repeats this handsignal

## 7.0 INSTRUCTIONS TO LOOKOUTS

- if there are two or more Site Lookouts, do this until all of them repeat this handsignal
- if there is an Intermediate Lookout, do this until that person repeats this handsignal

## 7.8 WHAT YOU MUST DO WHEN A TRAIN APPROACHES WHILE YOU ARE ACTING AS INTERMEDIATE LOOKOUT

- immediately wave your blue and white chequered flag slowly from side to side above your head
- do this until the Site Lookout repeats this handsignal
- if there are two or more Site Lookouts, do this until all of them repeat this handsignal

## 7.9 WHEN YOU MUST STOP LOOKOUT DUTIES

- if anyone being protected moves too far away to be able to hear your warning, or
- if your view of approaching trains is reduced or obscured, even if only momentarily, or
- if you need to stop lookout duties for personal needs or anything else affecting your concentration, or
- if, for any reason, you think it might be unsafe for the work to continue to rely on your lookout protection



## 7.0 INSTRUCTIONS TO LOOKOUTS

### 7.10 WHAT YOU MUST DO IF YOU NEED TO STOP LOOKOUT DUTIES

- immediately give a warning as if a train is approaching
- make sure everyone protected moves clear
- when everyone is in a position of safety, tell your TSC the reason for stopping

### 7.11 WHEN YOU MAY LEAVE YOUR POST

- you must not leave your post unless:
  - told to by your TSC, or
  - relieved by another Lookout, or
  - you have given a warning as described above and everyone is clear

## 8.0 INSTRUCTIONS TO DESIGNATED PERSONS RESPONSIBLE FOR PROTECTION

### 8.1 YOUR RESPONSIBILITY

- to make whatever arrangements are needed to prevent anyone being endangered by a movement of a vehicle while work takes place:
  - on the outside of a vehicle (including underneath), or
  - on the inside of a vehicle if steps or ladders are to be used

**NOTE:** you must also observe the instructions to Persons in Charge of Work as shown in Section Z where work takes place on or near electrified lines or sidings

## 8.0 INSTRUCTIONS TO DESIGNATED PERSONS RESPONSIBLE FOR PROTECTION

### 8.2 WHERE WORK TAKES PLACE OTHER THAN IN MAINTENANCE SIDINGS OR DEPOTS

#### 8.2.1 What you must do before work starts

- arrange for NOT TO BE MOVED boards or red flags to be provided during daylight or red lights (steady or flashing) during darkness or poor visibility
- arrange for these to be placed at the end of the vehicles on which work is to be done in the direction from which other vehicles might approach
- arrange this at both ends if necessary
- on a platform line, arrange this on the platform side so that the protection is clearly visible along the platform
- on a line adjacent to a running line, arrange this on the side further from the running line
- if work is to be done on the side of any vehicles next to a running line where the distance between the two lines is less than 3 metres (10 feet), a Track Safety Co-ordinator (TSC) must first be appointed
- if competent to do so, you may act as TSC and make the necessary arrangements to ensure that no-one is endangered by movements on the adjacent line

#### 8.2.2 What you must do additionally before work starts underneath a vehicle

**NOTE:** this is additional to the previous clause

- tell the Person in Charge of the line or siding

## 8.0 INSTRUCTIONS TO DESIGNATED PERSONS RESPONSIBLE FOR PROTECTION

- if the vehicle is in service and the Driver or Guard is present, make sure that they are aware that work is to take place
- in addition to the normal protection arrangements, arrange for the vehicle(s) concerned to be secured by scotches
- if there are other vehicles on the same line, secure one or two of them by handbrake or scotches in each direction from the vehicles concerned, if necessary

### 8.2.3 What you must ensure during the work

- the protected vehicles are not moved
- other vehicles are not allowed to make contact with them

### 8.2.4 What you must do when work is completed or suspended

- make sure that the vehicles are safe to be moved and any scotches are removed
- check that everyone is in a position of safety or well clear
- you may then remove the protection

**NOTE:** you are the only person permitted to remove this protection

## 8.3 WHERE WORK TAKES PLACE IN SIDINGS

**NOTE:** this clause applies in sidings used for maintenance or repairs, including cripple sidings but not where they form part of a depot (see clause 8.4), and not when only carriage servicing is taking place (in which case, clause 8.2 applies)

## 8.0 INSTRUCTIONS TO DESIGNATED PERSONS RESPONSIBLE FOR PROTECTION

### 8.3.1 Where there are designated cripple sidings

- as far as practicable, arrange for vehicles to be moved to these sidings to enable the work to be done

### 8.3.2 What you must do before work starts

- clip and padlock the points giving access to the siding so that movements into the siding cannot be made
- keep the key to the padlock in your possession
- arrange for NOT TO BE MOVED boards or red flags to be provided during daylight or red lights (steady or flashing) during darkness or poor visibility
- arrange for these to be placed at the end of the vehicles on which work is to be done in the direction from which other vehicles might approach
- arrange this at both ends if necessary
- make sure the vehicle(s) concerned are secured by scotches
- if there are other vehicles on the same line, secure one or two of them by handbrake or scotches - in each direction from the vehicles concerned, if necessary

### 8.3.3 What you must ensure during the work

- if it is necessary in connection with the work to move the vehicle(s) within the siding, make sure everyone is made aware of the intended movement and is well clear

## 8.0 INSTRUCTIONS TO DESIGNATED PERSONS RESPONSIBLE FOR PROTECTION

### 8.3.4 What you must do when work is completed or suspended

- make sure that the vehicles are safe to be moved and any scotches are removed
- check that everyone is in a position of safety or well clear
- you may then remove the protection

**NOTE:** you are the only person permitted to remove this protection

## 8.4 WHERE WORK TAKES PLACE IN DEPOTS

### 8.4.1 What you must do before work starts

- check that no shunting is taking place which may affect the vehicle(s) concerned
- arrange for protection to be provided by one of the following means in accordance with the local arrangements:
  - by securing of points
    - clip and padlock the points giving access to the siding so that movements into the siding cannot be made
    - keep the key to the padlock in your possession
  - by use of derailleurs, rail stops, timber baulks, etc
    - ensure these are operated or positioned to provide protection
    - keep the key to derailleurs/rail stops, etc in your possession

## 8.0 INSTRUCTIONS TO DESIGNATED PERSONS RESPONSIBLE FOR PROTECTION

- by use of stop signals/indicators
  - operate these to provide protection on the line(s) concerned
  - keep the operating keys in your possession
- by provision of STOP - AWAIT INSTRUCTIONS board
  - make sure that any movement you have previously authorised is complete
  - do not authorise any further movement
- arrange for the vehicle(s) concerned to be secured by scotches as shown in clause 8.3.2
- the arrangements for protection and securing by scotches described above do not apply if only carriage servicing is to be carried out
- you may then give an assurance to the first person (or group) that it is safe for work to start
- the first person will provide the necessary protection by flags, boards or lamps
- each subsequent person to start work will place an identification device (in accordance with the the local instructions) on the protection provided by the first person

### 8.4.2 What you must ensure during the work

- if it is necessary in connection with the work to move the vehicle(s) within the siding, make sure everyone is made aware of the intended movement and is well clear
- make sure that any scotches are removed and replaced, as necessary

## 8.0 INSTRUCTIONS TO DESIGNATED PERSONS RESPONSIBLE FOR PROTECTION

### 8.4.3 What you must do when work is completed or suspended

- you must receive an assurance from the last person or group who has been working under these arrangements that:
  - the vehicles are safe to be moved and any scotches have been removed
  - all flags, boards or lamps have been removed
  - everyone is in a position of safety or well clear
- you may then remove the protection arrangements which you provided

**NOTE:** you are the only person permitted to remove this protection

- where a STOP - AWAIT INSTRUCTIONS board is provided, you may now authorise movements to take place

## 9.0 INSTRUCTIONS TO HANDSIGNALMEN

### 9.1 WHEN YOU MAY ACT AS HANDSIGNALMAN

- ONLY if you are currently certificated as competent as a Handsignalman and ONLY on the instruction of the following persons:

CIRCUMSTANCES	ON INSTRUCTION OF
Defective or disconnected signal	Signalman
Single Line Working/Pilot Working	Pilotman
Protection of hand trolley	Person in Charge
Protection of engineering work on line not under Absolute Possession	Person in Charge
Protection of line blocked by an Absolute Possession	Person in Charge of Possession (PICOP)
Emergency speed restriction	Person in Charge

### 9.2 WHAT EQUIPMENT YOU MUST HAVE WITH YOU

- your current certificate of competence as Handsignalman
- sufficient detonators for the duty you are to perform
- a red, a yellow and a green flag
- a handlamp capable of showing a red light, a yellow light and a green light



## 9.0 INSTRUCTIONS TO HANDSIGNALMEN

### 9.3 WHAT YOU MUST DO WHEN ACTING AS HANDSIGNALMAN

- position yourself as instructed by the person appointing you
- report your arrival at a signal or signal box to the Signaller
- then work only to the instructions of the person appointing you
- place the required detonators on the line, unless you are appointed at a signal box
- place them far enough away from you so that the Driver will see your hand signal after they explode

**EXCEPTION:**     **if you are at a signal maintained at Danger, place them beside the signal**

- replace any exploded by trains
- exhibit the correct hand signal to the Driver of each approaching train
- make sure you clearly understand all instructions from the person appointing you and each Driver clearly understands the instructions which you are required to give
- do not leave your position unless:
  - withdrawn by the person appointing you (or by that person's relief), or
  - relieved by another Hand signalman

## 9.0 INSTRUCTIONS TO HANDSIGNALMEN

### 9.4 ADDITIONAL INSTRUCTIONS WHEN YOU ARE APPOINTED AT A DEFECTIVE OR DISCONNECTED SIGNAL

- position yourself at the signal or its normal location if it is missing
- exhibit a hand Danger signal to the Driver of each approaching train until it has stopped
- keep one detonator on the line to which the signal applies
- obtain the Signalman's permission for the train to proceed
- then give the Driver the necessary instructions
- when you are sure the Driver has understood these, you may remove the detonator and exhibit a yellow handsignal
- you must do this for each train unless the Signalman tells you that permission for the train to proceed AND the necessary instructions have already been given to the Driver
- in this case, the train need not be stopped and you must remove the detonator and exhibit a yellow handsignal

**EXCEPTION:** when appointed at a signal which cannot normally display a Danger aspect/indication, the above instructions do not apply; instead you must keep two detonators 60cm (2 feet) apart on the line concerned and exhibit a yellow handsignal to the Driver of each approaching train

## 9.0 INSTRUCTIONS TO HANDSIGNALMEN

### 9.5 ADDITIONAL INSTRUCTIONS WHEN YOU ARE APPOINTED IN CONNECTION WITH SINGLE LINE WORKING

- position yourself opposite the signal where trains may be required to stop
- exhibit a hand Danger signal to the Driver of each train approaching in the direction concerned on the line being used for Single Line Working until the train has stopped
- keep one detonator on that line
- obtain the Signalman's permission for the train to proceed
- then give the Driver the necessary instructions
- when you are sure the Driver has understood these, you may remove the detonator and exhibit a yellow handsignal
- you must do this for each train in the direction concerned unless the Signalman tells you that permission for the train to proceed AND the necessary instructions have already been given to the Driver
- in this case, the train need not be stopped and you must remove the detonator from the rail and exhibit a yellow handsignal

**EXCEPTION:**      **if the train is to draw forward to enable it to set back through a crossover, you must ALWAYS stop the train and remind the Driver of what is required before permission is given to draw forward**

- if a train approaches in the opposite direction, you may withdraw the protection if safe to do so, but it must be reinstated immediately after the train has passed

## 9.0 INSTRUCTIONS TO HANDSIGNALMEN

### 9.6 ADDITIONAL INSTRUCTIONS WHEN YOU ARE APPOINTED IN CONNECTION WITH THE PROTECTION OF A HAND TROLLEY OR ENGINEERING WORK

- keep three detonators, 20 metres (20 yards) apart on the line(s) concerned
- exhibit a hand Danger signal to any train approaching on that line
- do this until told by the Person in Charge that the line is safe for trains to pass
- if a junction signal is cleared for an unaffected route, you may remove the protection if safe to do so, but it must be reinstated immediately the train has passed or the signal is replaced to Danger
- whenever you are appointed at a signal or in a signal box, you must obtain the Signalman's assurance that the signal(s) will be maintained at Danger (for the affected route) until the line is safe for trains to pass
- additionally, when appointed in a signal box, you must countersign the Signalman's entries in the Train Register and stay there as a reminder to the Signalman

### 9.7 ADDITIONAL INSTRUCTIONS WHEN YOU ARE APPOINTED IN CONNECTION WITH AN ABSOLUTE POSSESSION

- keep three detonators 20 metres (20 yards) apart on the line concerned where instructed by the PICOP
- exhibit a hand Danger signal to the Driver of any train approaching the detonators in either direction

## 9.0 INSTRUCTIONS TO HANDSIGNALMEN

- do not allow any train to pass the detonators unless authorised by the PICOP
- reinstate the protection immediately after the train has passed

### 9.8 ADDITIONAL INSTRUCTIONS WHEN YOU ARE APPOINTED IN CONNECTION WITH AN EMERGENCY SPEED RESTRICTION

#### (a) WHEN AT THE WARNING POINT

- position yourself where you are clearly visible to Drivers of approaching trains
- keep two detonators 60cms (2 feet) apart on the line concerned
- exhibit a yellow handsignal waved slowly from side to side to the Driver of each approaching train
- replace the detonators immediately after the train has passed clear
- if a train approaches from the direction of the restriction, you may withdraw the detonators if safe to do so, but they must be replaced immediately after the train has passed
- if a junction signal is cleared for an unaffected route, you may withdraw the detonators if safe to do so, but they must be replaced immediately after the train has passed or the signal is replaced to Danger

#### (b) WHEN AT THE START OF THE RESTRICTION

- exhibit a yellow handsignal held steadily to the Driver of each approaching train

## 9.0 INSTRUCTIONS TO HANDSIGNALMEN

### (c) WHEN AT THE END OF THE RESTRICTION

- exhibit a green handsignal waved slowly from side to side to the Driver of each approaching train

### (d) WHEN AT THE SITE OF A SHORT RESTRICTION

- position yourself at the end of the restriction
- exhibit a yellow handsignal held steadily to the Driver of each approaching train
- when the train is close to you, replace this by a green handsignal waved slowly from side to side

### (e) IN ALL CIRCUMSTANCES

- make sure your handsignal does not conflict with the Danger aspect of any signal nearby applicable to the line concerned
- while such a signal shows a Danger aspect, you must exhibit a hand Danger signal at that signal instead of the handsignals described above

## 10.0 INSTRUCTIONS TO POINTS OPERATORS

### 10.1 WHEN YOU MAY ACT AS POINTS OPERATOR

- ONLY if you are currently certificated as competent to manually operate power operated points of the type(s) at the location concerned and ONLY on the instruction of the Signalman

### 10.2 WHAT EQUIPMENT YOU MUST HAVE WITH YOU

- your current certificate of competence as Points Operator
- clips, locks and scotches and the necessary keys and points handles

## 10.0 INSTRUCTIONS TO POINTS OPERATORS

**NOTE:** these must be taken to site unless they can be obtained from a designated place on site

- at least six detonators
- a red flag during daylight
- a handlamp during darkness or poor visibility

### 10.3 WHAT YOU MUST DO WHEN ACTING AS POINTS OPERATOR

#### 10.3.1 On arrival on site

- report your arrival to the Signaller
- check for any damage to, or obstruction in, the points
- tell the Signaller if any point motor is running continuously; cut off the power supply if possible, but do not insert the point handle while the motor is running

#### 10.3.2 Observing the Signaller's instructions

- you must not operate any points unless expressly instructed by the Signaller
- whenever points are to be operated, the Signaller will tell you:
  - which points to operate
  - to which position to move them
  - whether they must be secured by clip, lock and scotch or by scotch only

## 10.0 INSTRUCTIONS TO POINTS OPERATORS

- make sure you fully understand these instructions
- after operating the points you must:
  - walk through the route
  - check that each point end is lying in the required position
  - check that the necessary clips, locks and scotches are applied to those points required to be secured
- give the Signaller the details of the route now set, quoting point numbers, positions and whether secured
- do not then operate or release any points until further instructed by the Signaller

**REMEMBER:**      **consecutive train movements may pass without the points being moved again**

### 10.3.3 Manual operation of points

- you must ensure that the power supply is cut off before moving or securing any points
- the power supply must not then be restored until authorised by the Signaller
- when moving the points, turn the handle in the required direction until the points complete their travel; continue cranking until resistance is met, proving the lock is home

**NOTE:**      **air points or clamp lock points must be operated by means of the bar or pump handle provided for this purpose**

- you must secure the points by clip, lock and scotch or by scotch only as instructed by the Signaller



## 10.0 INSTRUCTIONS TO POINTS OPERATORS

### 10.3.4 When manual operation of points is no longer required

- the Signaller will advise you accordingly and tell you to restore the power supply to the points
- make sure that any clip, lock or scotch is removed from the points before doing this
- you must then secure and lock the point machine covers and restore any crank handles obtained locally
- tell the Signaller when all is in order, but do not leave the site until the Signaller confirms that any required testing has been completed satisfactorily

**SUPPLEMENT TO WEEKLY CIRCULAR NO. 3418**

**WEEK-ENDING 12TH SEPTEMBER, 2010**

# **IARNROD EIREANN RULE BOOK SECTION B PART TWO**

## **11.0 INSTRUCTIONS TO SIGNALLING, ELECTRICAL & TELECOMMUNICATIONS (SE&T) WORK PROTECTOR**

This notice must be retained and inserted in the Rule Book after page 72 section B, Part 2

Instructions Included are applicable to work carried out on the Iarnrod Eireann network only and do not apply to work undertaken on the N.I. Railways network.

**Issued by:  
P. Cuffe  
Chief Safety & Security Officer,  
Connolly Station.  
30th August, 2010**

**CS & SO 500/105**

Abbreviations used:

SE&T - Signalling, Electrical & Telecommunications

TSC - Track Safety Coordinator

## **11.0 INSTRUCTIONS TO SE&T WORK PROTECTOR**

### **11.1 YOUR RESPONSIBILITY**

- to provide protection of SE&T works as instructed by the TSC.
- to provide a prompt warning of each approaching train as required by your TSC.

### **11.2 WHEN YOU MAY ACT AS SE&T WORK PROTECTOR**

- ONLY if you are currently certificated as competent as SE&T Work Protector and ONLY on the instruction of your TSC.

### **11.3 WHAT EQUIPMENT YOU MUST HAVE WITH YOU**

- your current certificate of competence as a SE&T Work Protector.
- a whistle or horn.
- a red flag, during daylight.
- a handlamp during darkness, poor visibility or in a tunnel.
- a SE&T "Work Protector" armband, which you must wear on your left arm.

**11.4 WHAT YOU MUST CHECK WITH YOUR TSC BEFORE STARTING SE&T WORK PROTECTION DUTIES**

- who you will be protecting.
- which signalling equipment they will be working on.
- on which line(s) warning is required.
- when and how you must give a warning.
- where is the position of safety to which the group must go.

**11.5 WHAT YOU MUST DO WHEN ACTING AS SE&T WORK PROTECTOR**

- remain in the position specified by your TSC to give a warning, when a Train is approaching.
- be alert constantly for approaching trains.
- avoid distraction.
- take no part in the work.

**11.6 WHAT YOU MUST DO WHEN REQUIRED TO GIVE A WARNING, WHEN A TRAIN IS APPROACHING**

- immediately sound your whistle or horn.
- if necessary, shout as well.
- make sure everyone being protected immediately raises an arm above the head and moves to a position of safety.
- if anyone does not do this, sound your whistle or horn again - this time with a series of short, sharp blasts (and shout, if necessary) until everyone is clear.
- if you are required to give warning by touch, do this immediately a train approaches.
- repeat this warning if anyone does not move clear.

**11.7 WHEN YOU MUST STOP SE&T WORK PROTECTOR DUTIES**

- if anyone being protected moves too far away to be able to hear your warning, or
- if your view of approaching trains is reduced or obscured even if only momentarily, or
- if you need to stop SE&T Work Protector Duties for personal needs or anything else is affecting your concentration, or
- if, for any reason, you think it might be unsafe for the work to continue to rely on your SE&T Work Protector protection.

**11.8 WHAT YOU MUST DO IF YOU NEED TO STOP SE&T WORK PROTECTOR DUTIES**

- immediately give a warning as if a train is approaching.
- make sure everyone protected moves clear.
- when everyone is in a position of safety, tell your TSC the reason for stopping.

**11.9 WHEN YOU MAY LEAVE YOUR POST**

- you must not leave your post unless:
  - told to by your TSC.
  - relieved by another SE&T Work Protector.
  - you have given a warning as described above and everyone is clear.

# SECTION C

## SIGNALS

Not Used

## **1.0 PRINCIPLES**

### **1.1 MEANING OF SIGNALS**

- the meaning of each signal aspect/indication must be understood as described in this Section C

### **1.2 WORKING OF SIGNALS**

- signals must be operated by the Signaller in accordance with the appropriate instructions shown in the Signaller's General Instructions

### **1.3 OBSERVANCE OF SIGNALS**

- the aspect/indication of each signal must be obeyed by the Driver of the train to which it applies
- the person controlling a movement by handsignals or other means must also obey the aspect/indication of each signal applying to the movement
- the Signaller must also understand the instructions applicable to Drivers in this Section C



## 2.0 DEFINITIONS AND EXPLANATION OF TERMS

### 2.1 DISTANT SIGNAL

- this means a signal which cannot display a Danger aspect or indication

### 2.2 STOP SIGNAL

- this means a signal capable of displaying a Danger aspect or indication





### 2.3 BLOCK SECTION, HOME AND SECTION SIGNALS

- the BLOCK SECTION is the portion of line between the last stop signal (i.e. SECTION SIGNAL) controlled from one signal box and the first stop signal (i.e. HOME SIGNAL) controlled from the next signal box
- this applies only on lines worked by the Absolute or Electric Token Block Systems

## 3.0 INSTRUCTIONS TO DRIVERS

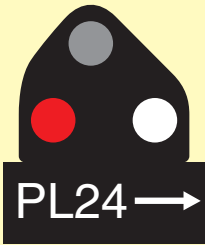
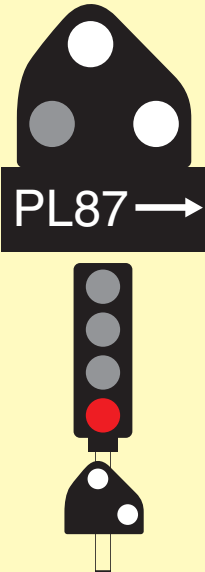
### 3.1 OBSERVANCE OF COLOUR LIGHT SIGNALS

#### 3.1.1 What you must understand by main aspects

DESCRIPTION	DIAGRAM	ASPECT	MEANING
Danger Aspect		Red Light	Stop
Proceed Aspects Caution		One Yellow Light	Be prepared to stop at the next signal
Preliminary Caution		Two Yellow Lights	Be prepared to find the next signal at Caution
Clear		Green Light	Next signal displaying a proceed aspect

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.1.2 What you must understand by position light shunt aspects

DESCRIPTION	DIAGRAM	ASPECT	MEANING
Danger Aspect		One White Light and One Red Light, displayed horizontally	Stop
Proceed		Two White Lights at an angle of 45 degrees (left light uppermost)	The line ahead may be occupied. Proceed cautiously, prepared to stop short of any obstruction. The associated main aspect (where provided) may be passed at Danger

**NOTE:** at certain signals, the Danger aspect comprises two red lights, displayed horizontally

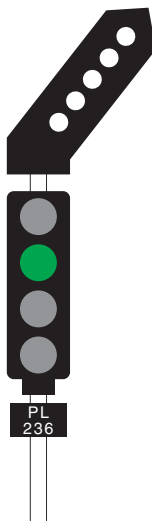
## 3.0 INSTRUCTIONS TO DRIVERS

### 3.1.3 What you must understand by call-on aspects

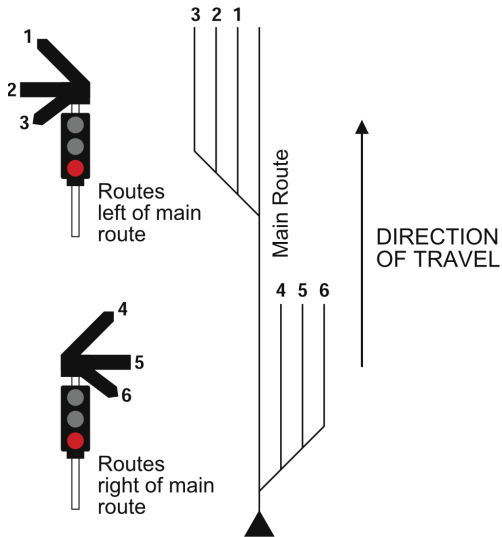
DESCRIPTION	ASPECT	MEANING
Normal	No aspect	Obey main aspect
Proceed	One Small Yellow Light OR Two White Lights at an angle of 45 degrees (left light uppermost)	The line ahead is occupied. Proceed cautiously, prepared to stop short of the obstruction. The associated main aspect may be passed at Danger

### 3.1.4 What you must understand by indications of route

- an indication of route may be given by:
  - a junction indicator (displaying an inclined row of white lights above the signal)



**3.0 INSTRUCTIONS TO DRIVERS**



or

- the exhibition of figures/letters next to the signal



or

- off-setting the signal(s) for the diverging route(s) to the left and/or right of the main post

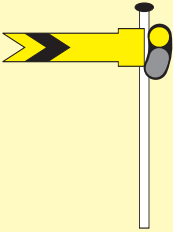
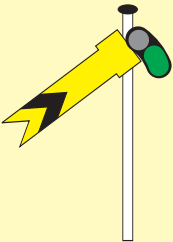
## 3.0 INSTRUCTIONS TO DRIVERS

### 3.1.5 What you must understand about signals not in use

- these are indicated by:
  - a main and/or position light aspect covered over, and
  - a large X displayed on the cover on a main aspect

## 3.2 OBSERVANCE OF SEMAPHORE SIGNALS

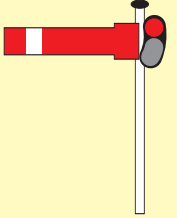
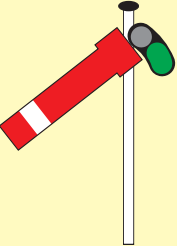
### 3.2.1 What you must understand by indications given by distant signals

POSITION	DIAGRAM	INDICATION	MEANING
Caution		Yellow Arm horizontal <b>OR</b> Yellow Light (by night)	Be prepared to stop at the next stop signal
Clear		Arm lowered 45 degrees <b>OR</b> Green Light (by night)	All associated signals worked from the same signal box are clear

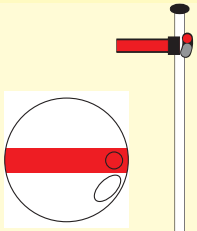
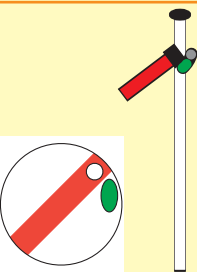
- where only a distant signal is provided on the approach to a level crossing, you must be prepared to stop short of the crossing when the CAUTION indication is exhibited

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.2.2 What you must understand about indications given by stop signals

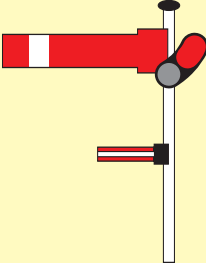
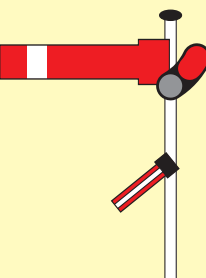
POSITION	DIAGRAM	INDICATION	MEANING
Danger		Red Arm horizontal <b>OR</b> Red Light (by night)	Stop
Clear		Arm lowered 45 degrees <b>OR</b> Green Light (by night)	Proceed

### 3.2.3 What you must understand about indications given by shunting signals

POSITION	DIAGRAM	INDICATION	MEANING
Danger		White disc with Red band, <b>OR</b> Small Red Arm horizontal <b>OR</b> Red Light (by night)	Stop
Clear		Disc described above at 45 degrees <b>OR</b> Small Red Arm lowered 45 degrees <b>OR</b> Green Light (by night)	The line ahead may be occupied. Proceed cautiously, prepared to stop short of any obstruction

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.2.4 What you must understand about indications given by call-on signals

POSITION	DIAGRAM	INDICATION	MEANING
Normal		Small Red Arm horizontal <b>OR</b> Red Light (by night)	Obey main signal
Clear		Small Red Arm lowered 45 degrees <b>OR</b> Green Light (by night)	The line ahead is occupied. Proceed cautiously prepared to stop short of the obstruction. The associated main signal may be passed at Danger

### 3.2.5 What you must understand about indications of route

- an indication of route may be given by:
  - arranging two or more signals side by side on the same post or gantry so that their relative positions show the route to which each applies, or
  - arranging two or more signals vertically on the same post, in which case the top signal applies to the line on the extreme left, the second signal applies to the line next in order from the left, and so on



## 3.0 INSTRUCTIONS TO DRIVERS

### 3.2.6 What you must understand about signals not in use

- these are indicated by:
  - a large X fitted on the signal arm, and/or
  - a disc covered over

## 3.3 OBSERVANCE OF REPEATING SIGNALS AND OTHER INDICATORS

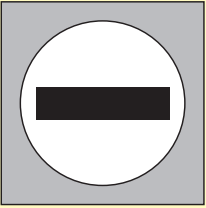
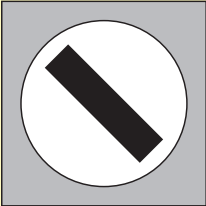
### 3.3.1 Repeating signals (non banner type)

- where provided, a repeating signal is placed on the approach to the signal to which it applies
- it is identifiable by a signal post plate with the word "REPEATER"
- on passing a repeating signal, you must expect to find the signal to which it applies exhibiting the corresponding aspect/indication

### 3.3.2 Banner repeating signals

- these comprise an illuminated small black semaphore arm in a frame
- where provided, it is placed on the approach to the signal to which it applies
- you must understand the meaning of the positions of banner repeating signals as follows:

## 3.0 INSTRUCTIONS TO DRIVERS

POSITION	DIAGRAM	INDICATION	MEANING
ON		Horizontal Arm	Be prepared to find the signal to which it applies at Danger
OFF		Arm at angle of 45 degrees	Signal to which it applies is exhibiting a proceed aspect

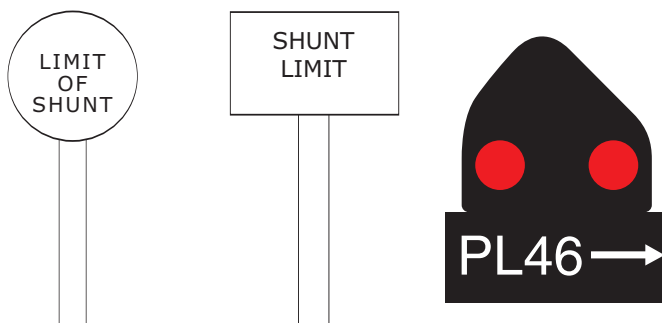
### 3.3.3 Off indicators

- these comprise an illuminated sign showing “OFF” when the signal to which it applies is exhibiting a proceed aspect
- no indication is shown when the signal concerned is at Danger
- they are normally provided to assist the Guard or Person in Charge to check that the signal is cleared before starting a train
- you may rely on this as an indication that the signal concerned is exhibiting a proceed aspect but you must understand that the signal may be cleared for a train ahead when on a platform line

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.3.4 Limit of shunt indicators

- these comprise a sign with the words "LIMIT OF SHUNT" and, by night, a red light (white light on single lines)
- alternatively, these comprise two red lights, displayed horizontally
- you must not allow any part of your train to pass this indicator unless authorised by the Signaller



### 3.3.5 Stop boards

- these comprise a board with the word "STOP"; other instructions may also be shown
- you must understand that a stop board has the same meaning as a stop signal at Danger
- you must stop your train at the stop board
- you must not then proceed except in accordance with the instructions shown or on the authority of an authorised person

## 3.0 INSTRUCTIONS TO DRIVERS



### 3.3.6 SPAD Indicators

- these comprise flashing red lights and/or an indicator showing “STOP”, which are normally unlit
- if the lights/indicator becomes illuminated, you must stop immediately (unless you have previously been told otherwise) and inform the Signaller

### 3.3.7 Braking point marker boards

- these comprise a blue sign with a vertical white line and two orange coloured lines, one horizontal and the other at 45°
- they are placed on the approach to certain distant signals protecting manned level crossings
- on passing this board, you must reduce speed as necessary to ensure your train can stop short of the level crossing (or protecting stop signal, where provided)
- if you find the distant signal is cleared, you may then resume normal speed

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.4 GENERAL INSTRUCTIONS CONCERNING OBSERVANCE OF SIGNALS

#### 3.4.1 Observance of signals

- you must obey each signal applying to your train
- if your train stops on the approach to a signal which has been cleared, you must check that it remains cleared immediately before restarting
- if your train stops partly ahead of a signal which has been cleared and with a part of the train in rear of the signal, you may, when ready, restart and proceed in accordance with the aspect previously shown, unless otherwise instructed
- if you find a junction signal cleared for the wrong route, you must stop at the signal if safe and practicable, and tell the Signalman
- if your train is stopped or nearly stopped before the clearance of a stop signal other than a colour light signal capable of displaying a yellow aspect, you must understand that the next signal may be at Danger
- if this occurs at the signal in rear of the signal box, you must also be prepared to stop at the box
- if a main signal cannot be cleared because of a defect, the Signalman is permitted to clear an associated subsidiary aspect (where provided) but you will be so advised by the Signalman; you must then proceed in accordance with the subsidiary aspect
- if your train is stopped at a signal at Danger, you must place the Driver's Reminder Appliance (DRA), where provided, in the WAITING SIGNAL position

## 3.0 INSTRUCTIONS TO DRIVERS

- do this immediately on stopping, or immediately on entering a driving cab which is to be brought into use
- you must replace the DRA to the NORMAL position as soon as the signal clears
- if your train inadvertently passes a signal at Danger (for whatever reason), you must stop immediately and inform the Signalman; you must not then restart until authorised by the Signalman

### 3.4.2 Signals controlling movements into or on reception lines or sidings

- when these signals are cleared, you must understand that the line or siding ahead may be obstructed
- you must proceed cautiously and be prepared to stop short of any obstruction

**NOTE:** where the signal controls more than one route, you must beware that the route set may not be the one required

### 3.4.3 Siding exit signals

- while waiting the clearance of a signal controlling the exit from sidings, you must not allow the front of your train to stand foul of other lines
- when that signal is cleared, you must not move towards it without the permission of the Shunter if that signal also applies to other sidings where there are other trains or locomotives

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.4.4 Position light signal aspects and shunting signals

- when making a shunting movement on the authority of these signals, you must not allow your train to proceed on its journey unless:
  - the train returns to the rear of the signal which then exhibits the appropriate proceed aspect/indication for the departing movement, or
  - when this is not practicable, you personally obtain the Signaller's permission to proceed

### 3.4.5 Observance of signals when a train or movement reverses

- when a train or movement is to reverse, you must then obey the signal controlling movements in the direction you are now to proceed
- you must not start any movement in the reverse direction unless:
  - the controlling signal is cleared, or
  - you have obtained the Signaller's permission to move towards the controlling signal to await its clearance
- when any part of your train is ahead of the controlling signal in the direction to which it applies, you must not start any movement in the reverse direction unless:
  - the controlling signal is cleared, or
  - you have obtained an assurance from the Shunter that it is cleared, where you are unable to see the signal, or
  - you have personally obtained the Signaller's permission to make a movement in the reverse direction where the signal is locked at Danger by track circuits and cannot be cleared and the train cannot be moved so that it is completely in rear of the signal

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.4.6 Stopping the train when the section signal is at Danger

- this instruction applies only where:
  - the section signal is not equipped with a signal-telephone, AND
  - train-radio is not available
- when the section signal is at Danger, you must not draw forward to the signal further than necessary for station or shunting duties or to pass clear of any junction in rear
- as far as practicable, the train must be stopped within sight of the Signaller

### 3.4.7 Observance of “facing shunt” signals

- on certain lines, where a main signal is cleared, position light or shunt signals within the signal section ahead are not cleared
- you may disregard these position light or shunt signals
- you must, however, understand that the clearance of a position light (unless associated with a main aspect) or shunt signal ON ANY LINE does not authorise you to pass a main signal at Danger

## 3.5 OBSERVANCE OF SIGNAL FAILURES OR IRREGULARITIES

### 3.5.1 Signals which are out, missing or indistinctly shown

- you must consider a stop signal to be at Danger and a distant signal at Caution in any of the following circumstances:



## 3.0 INSTRUCTIONS TO DRIVERS

- the absence of a signal where one should be shown
- a colour light signal where there is doubt as to which aspect is shown
- a semaphore signal indistinctly shown
- a white light where there should be a red, yellow or green
- if a subsidiary signal is cleared but without the normal indication of route, you must proceed cautiously and be prepared to stop short of any obstruction; a shunting movement must not proceed further than necessary for the movement

### 3.5.2 Reporting signal failures or irregularities

- you must immediately tell the Signaller, stopping specially if necessary, if you become aware of:
  - a failure or irregularity in the working of signals, or
  - an irregular aspect sequence, or
  - a signal which is out, missing or improperly shown
- you must inform the Signaller at the first convenient opportunity if you become aware of:
  - a position light or shunt signal which is out, missing or improperly shown but which applies to another line
  - a stop board or Limit of Shunt indicator which is missing or unlit when it should be lit
- you must also report any signal where sighting is made difficult by foliage or other circumstances

# **SECTION D**

**PASSING SIGNALS AT DANGER AND/OR  
MAKING MOVEMENTS IN THE WRONG  
DIRECTION**

**Section D****Weekly Circular Amendment Record**

Any amendment to this Section D issued via a Weekly Circular Notice will be recorded in the table below and displayed until the respective Rule Book pages are issued.

<b>WC No.</b>	<b>WE date</b>	<b>Description of Amendment</b>
3777	30.07.17	An additional circumstance, (k), for which authority to pass a signal at danger may be granted is added to Clause 2.1.

## 1.0 PRINCIPLES

### 1.1 SECURITY NORMALLY PROVIDED BY THE SIGNALLING SYSTEM

- this is not available when:
  - a signal is passed at Danger
  - a wrong direction movement is made where a signal is not provided

### 1.2 SAFETY WHEN PASSING SIGNALS AT DANGER OR DURING WRONG DIRECTION MOVEMENTS

- safety then depends on:
  - the Signaller observing the appropriate instructions before authorising the movement
  - the Signaller and Driver reaching a clear understanding as to what is required
  - the Driver observing the appropriate instructions throughout the movement
- such movements must not be authorised by the Signaller nor made by the Driver unless:
  - the circumstances as listed in clause 2 apply, and
  - the appropriate Rules and Instructions are observed, and
  - it is safe to do so

**RULE BOOK SECTION D**

**ADDITION TO CLAUSE 2.1 'CIRCUMSTANCES IN WHICH SIGNALS MAY BE PASSED AT DANGER'**

All concerned please amend Rule Book Section D Clause 2.1 to include the following additional circumstance (k) for which authority to pass a signal at danger may be granted.

- (k) Where a light locomotive or empty multiple unit train is to be coupled to a train so that it can proceed on its journey and a position light or shunt signal is not provided (IÉ lines only).

This instruction is applicable on the Iarnród Éireann (IÉ) Network only.

Explanation

This additional instruction is being introduced primarily to facilitate 'run around' movements of loco hauled trains but may also be utilised when it is necessary for an empty multiple unit train to also 'run around' another multiple unit train.

Typically this circumstance will apply at a location when a loco is required to run around its train, for example, at a station interlocking at the end of a single line section, but position light or shunt signals are not provided to authorise the loco past the Main aspect stop signal in order to recouple to its train.

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This notice must be cut out and retained in Section D of the Rule Book at page D4.

Any queries or requirement for further clarification regarding the introduction of this new instruction should be forwarded to the IM Procedures Unit using the following email address: [IEIMProceduresUnit@irishrail.ie](mailto:IEIMProceduresUnit@irishrail.ie)

**W.C. 3777**

**W.E. 30/07/2017**

**Head of Safety IÉ Infrastructure 400/8/D/01**

## 2.0 AUTHORITY FOR MOVEMENTS

### 2.1 CIRCUMSTANCES IN WHICH SIGNALS MAY BE PASSED AT DANGER

- (a) an Engineer's train is to move towards, on or from a line under Absolute Possession
- (b) Single Line Working applies
- (c) Working of Single Lines by Pilotman applies
- (d) the section signal is to be passed for shunting purposes
- (e) the signal cannot be cleared because a movement is required to start from ahead of the signal
- (f) the signal is defective or disconnected or cannot be cleared because of a failure of signalling or level crossing equipment
- (g) the line is to be examined to check whether it is clear
- (h) a train is to enter the section to assist a disabled train
- (i) a train is to travel through the section after a failed train (or portion) has been withdrawn from an Absolute Block section
- (j) a train is to pass through the section in accordance with the Absolute Block Regulation 3.5 or Electric Token Block Regulation 3.5 and the section signal cannot be cleared

## 2.0 AUTHORITY FOR MOVEMENTS

### 2.2 CIRCUMSTANCES IN WHICH WRONG DIRECTION MOVEMENTS MAY BE MADE WHERE A SIGNAL IS NOT PROVIDED

- (a) an Engineer's train is to move towards, on or from a line under Absolute Possession
- (b) Single Line Working applies
- (c) a train is to set back after:
  - over-running a platform, or
  - taking the wrong route
- (d) a train is to set back from or towards a line which has become blocked by an accident, failure, obstruction or other exceptional incident
- (e) a train is to set back because it cannot continue due to failure or because it cannot be driven from the leading cab
- (f) the front portion of a divided train is to set back to the rear portion (but not where it would pass over any automatic or manned level crossing)
- (g) a light locomotive(s) or empty multiple unit train is to proceed in the wrong direction over the unaffected line in order to assist a failed train
- (h) a shunting movement is to set back through points worked from a ground frame

## 2.0 AUTHORITY FOR MOVEMENTS

### 2.3 APPLICATION OF INSTRUCTIONS IN THIS SECTION D

- these instructions apply in all circumstances listed in clauses 2.1 and 2.2 except 2.2(h)
- these instructions do not, however, apply in respect of signals protecting manned level crossings where they are worked by the Crossing Keeper and are not under the Signalman's control (see Section G)

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.1 BEFORE THE MOVEMENT STARTS

#### 3.1.1 How you must obtain authority for the movement

**IMPORTANT:** this applies whenever you are to pass a signal at Danger or make a wrong direction movement for which a signal is not provided

- using whatever means is available, you must speak with and obtain the personal authority of:
  - the Signalman, or
  - the Pilotman or Handsignalman, when acting on the Signalman's instructions, or
  - another person where expressly permitted in the appropriate Rules and Instructions
- when instructed by that person, you must ensure that you clearly understand what is required and how far the movement may proceed



## 3.0 INSTRUCTIONS TO DRIVERS

**EXCEPTION:** if a signal is at Danger in rear of a signal box and the Signaller there exhibits a yellow handsignal, you must accept this as authority to proceed as far as the signal box

### 3.1.2 What you must understand about handsignals

- you must not regard any handsignal as authority to pass a signal at Danger unless:
  - you have received the necessary instructions at the signal, or
  - you have previously been advised of the circumstances and expressly told to obey the handsignal exhibited at the signal concerned, or
  - the signal is in rear of the signal box and the Signaller exhibits a yellow handsignal
- when a handsignal is used to confirm that you have authority to proceed, a YELLOW handsignal is used in connection with passing signals at Danger or making unsignalled movements and a GREEN handsignal is used in all other circumstances

### 3.1.3 Temporary Block Working

- during extensive failures or extensive disconnections of signalling equipment on Track Circuit Block double lines, Temporary Block Working may be introduced between strategic locations
- this enables authority to be given for two or more consecutive stop signals to be passed at Danger
- before entering or fouling a section where Temporary Block Working applies, you must have completed a Temporary Block Working Ticket (see page D23) at the Signaller's dictation

## 3.0 INSTRUCTIONS TO DRIVERS

- this applies unless:
  - your train is worked by two locomotives and the Ticket is being carried by the Driver of the leading locomotive (who must advise the other Driver of the circumstances), or
  - your train is to enter an obstructed section to assist a disabled train or remove a portion of a divided train

### 3.1.4 Passing a section signal at Danger for shunting purposes

- you will first be instructed by the Signaller if it is necessary to pass the section signal at Danger for shunting purposes

### 3.1.5 When you must obtain an Authority Number for the movement

- this applies whenever you are directly authorised to make the movement by the Signaller (and not via any of the other persons listed in clause 3.1.1)
- it applies whether the movement is authorised by radio, telephone or face-to-face
- it does not, however, apply when you are authorised to:
  - pass the section signal at Danger for shunting purposes, or
  - make a shunting movement on the authority of a position light aspect or shunting signal where the signal is to be passed at Danger/Normal, or
  - pass a signal at Danger in rear of the signal box, or
  - make a wrong direction movement for which a signal is not provided

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.1.6 How you must obtain an Authority Number for the movement

- where an Authority Number is required, you must not consider any movement to be authorised by the Signaller until the following procedure is completed
- having reached a clear understanding with you as to what is required, the Signaller will then give the following message which you must enter on an Authority Form, Part A (see page D22):

Train No ..... authorised to pass

Signal No ..... at Danger

and proceed to .....

- if, however, Temporary Block Working applies, the Signaller will dictate the details of the arrangements which you must enter on a Temporary Block Working Ticket, Part A (See page D23)
- read back to the Signaller the details which you have entered on Part A of the Form or Ticket
- the Signaller will then give you an Authority Number and the time of issue
- you must record this on Part B of the Form or Ticket
- the movement may then proceed
- you must hand in the Form when booking off duty but you must surrender the Ticket as shown in clause 3.3.1

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.2 DURING THE MOVEMENT

#### 3.2.1 Observance of instructions

- you must observe the instructions given by the person authorising a signal to be passed at Danger or a wrong direction movement for which a signal is not provided

#### 3.2.2 Use of the horn

- on starting, give one long blast of the horn
- during a wrong direction movement, frequently give a series of short blasts in order to give adequate warning to anyone on or near the line

#### 3.2.3 Passing over points

- approach cautiously any points which are facing to the movement and any switch diamonds or swing nose crossings
- when practicable, check that they are in the correct position
- do not exceed 16 kmh (10 mph) when passing over such points or crossings
- during a wrong direction movement, do not pass over any unworked points unless they are secured for the safety of the movement

#### 3.2.4 Passing over level crossings

- approach cautiously and do not pass over any manned level crossing without first ensuring it is safe to do so
- during a wrong direction movement, approach cautiously and do not pass over any automatic level crossing without first ensuring it is safe to do so

## 3.0 INSTRUCTIONS TO DRIVERS

- additionally (during a wrong direction movement), stop and sound the horn before passing over any level crossing equipped with miniature warning lights

**NOTE:** at certain crossings, the Crossing Keeper or Emergency Operator will indicate that it is safe to pass over the crossing by exhibiting a green handsignal

### 3.2.5 Speed of movements

- you must control the speed of your train throughout the section of line concerned so that you can stop safely and well clear of any obstructions
- when determining your speed, take into account:
  - the braking ability of your train
  - the distance ahead you can see to be clear
  - darkness, or poor visibility
  - the curvature of the line
  - anything affecting the view ahead

**IMPORTANT:** you must always be able to stop within the distance you can see the line to be clear

- these instructions concerning speed of movements do not apply in the following circumstances:
  - during Single Line Working, or
  - during Working by Pilotman, or
  - during Temporary Block Working, or

## 3.0 INSTRUCTIONS TO DRIVERS

- on a single line where you are in possession of the Token  
unless it is necessary, while such circumstances apply, for a train to enter the section in order to:
  - check whether the section is clear, or
  - assist a disabled train
- speed must not exceed 80 kmh (50 mph) during Temporary Block Working
- when making a wrong direction movement during Single Line Working, speed must not exceed 80 kmh (50 mph) and must be further reduced where the approach view of trains is restricted so that adequate warning will be given to anyone on or near the line

### 3.2.6 Observing a stop signal ahead

- if you observe a stop signal ahead exhibiting a proceed aspect after you have been authorised to pass a signal at Danger, do NOT assume the line is clear for your train
- you must remember the possibility that the signal may be cleared for a train ahead which is near that signal

## 3.3 AFTER THE MOVEMENT IS COMPLETED

### 3.3.1 Where Temporary Block Working applies

- you must surrender the Ticket to the person appointed to collect these at the end of the section, immediately on arrival

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.3.2 Where the section signal is passed at Danger for shunting purposes

- you must not then proceed on your journey until:
  - the section signal is cleared, or
  - the Signaller authorises you to do so

## 4.0 INSTRUCTIONS TO SIGNALMEN

### 4.1 BEFORE AUTHORISING A MOVEMENT TO PASS A SIGNAL AT DANGER

#### 4.1.1 What you must first check

- the portion of line concerned is clear and safe for the movement in accordance with the Train Signalling Regulations
- the barriers or gates at any manned level crossing are closed to road traffic
- the points in the route concerned are operated to the required position (as specified in the Signaller's Special Instructions, where issued)
- all points in the route which are facing to the movement concerned are secured by clip, lock and scotch and those which are trailing are secured by scotch

**NOTE:** this does not apply to any points secured by a facing point lock

- any ground frame release giving access to the route is normal unless it is required to be operated for the movement
- the required normal or reverse indications are obtained

## 4.0 INSTRUCTIONS TO SIGNALMEN

- the necessary reminder appliances are used

**NOTE:** you should obtain the assistance of any other competent person available in the signal box to check the route setting whenever practicable

### 4.1.2 What you must also do if power operated points cannot be operated normally

- arrange for a Points Operator (PO) to manually operate and/or secure the points
- if this is the first movement, or if the required route is different from that taken by the previous train, tell the PO:
  - the route to be taken by the train
  - which points must be set and in which position and whether they must be secured by clip, lock and scotch or by scotch only
  - to tell you when this has been done
- wait until the PO confirms that these arrangements have been made
- ask the PO to give you details of the route which has been set and, provided this is correct, tell the PO to maintain that route until you advise otherwise

**NOTE:** you must check these details against the route setting list (where provided)

- if, however, you are then able to obtain correct indications for the points, you must, instead:



## 4.0 INSTRUCTIONS TO SIGNALMEN

- immediately instruct the PO as shown in clause 4.5
- when the PO confirms all is in order, clear the signal for the train to proceed normally
- in these circumstances, the provisions of this Section D no longer apply
- you must note in the Train Register:
  - the name of the PO
  - the times when the PO arrives on site and when you authorise the PO to leave

### 4.1.3 What you must also do if mechanically operated points cannot be operated normally

- arrange for a suitable person (yourself if necessary) to check that the points are in the correct position
- arrange for all points in the route which become facing to be secured by clip, lock and scotch and those which become trailing to be secured by scotch
- work the lever(s) concerned to correspond with the required position of the points etc
- set the facing points on any other line to avoid conflicting movements normally prevented by the interlocking
- make sure that the signals for such conflicting movements are at Danger if the interlocking is out of order

### 4.1.4 What you must do to prevent conflicting movements

- as far as practicable, you must operate any facing points on other lines to prevent conflicting movements

## 4.0 INSTRUCTIONS TO SIGNALMEN

- if you are operating a mechanical lever frame, reverse all levers which ordinarily release the signal lever for the signal to be passed at Danger and normalise those which ordinarily lock that signal lever
- if the signal to be passed at Danger is defective or disconnected or cannot be cleared because of a failure of signalling equipment, you must, if possible, operate the signal control device concerned to obtain the security of the interlocking
- if you are operating a route setting panel, set the route concerned but only after all the other arrangements in this clause 4.1 have been made

**EXCEPTIONS: do NOT set the route if:**

- **there is a track circuit failure, or**
- **the entrance signal is to be maintained at Danger and it has not been fixed at Danger by the Technician**

## 4.2 BEFORE AUTHORISING A MOVEMENT IN THE WRONG DIRECTION

### 4.2.1 What you must first check

- the instructions in clauses 4.1.1 to 4.1.3 are observed
- any unworked points are correctly secured
- any AHB or LB level crossing is locally operated
- the line is clear as shown below

## 4.0 INSTRUCTIONS TO SIGNALMEN

### 4.2.2 How far the line must clear

- normally, at least 400 metres ( $\frac{1}{4}$  mile) ahead of the signal or location to which the movement is authorised to proceed
- this does not apply if the movement will proceed as follows:
  - to the point of an obstruction, or
  - to a stationary train or vehicle, or
  - to the detonators protecting an Absolute Possession, or
  - beyond the point where it will return to a line in the right direction
- during Single Line Working, the line must be clear as shown in the Train Signalling Regulations

## 4.3 WHEN AUTHORISING EACH MOVEMENT

### 4.3.1 What you must do when instructing the Driver

- having reached a clear understanding, tell the Driver what is required and how far the movement may proceed
- instruct the Driver to proceed cautiously, and be prepared to stop short of any obstruction

**EXCEPTION:** this applies during Single Line Working, Working by Pilotman, or Temporary Block Working, or on a single line where the Driver is in possession of the Token ONLY when a train is to enter the section to check whether it is clear or to assist a disabled train

- instruct the Driver to approach cautiously and not pass over any manned level crossing without first ensuring it is safe to do so

## 4.0 INSTRUCTIONS TO SIGNALMEN

- in the case of a wrong direction movement, you must instruct the Driver to:
  - stop and sound the horn before passing over a level crossing with miniature warning lights
  - approach cautiously and not pass over any other automatic level crossing without first ensuring it is safe to do so
- make certain the Driver clearly understands what is required
- where necessary in accordance with clause 4.3.5, observe the procedure for issuing an Authority Number
- if the train has stopped at your signal box, you may then exhibit a yellow handsignal as authority to proceed
- record the details of the movement you have authorised in the Train Register

### 4.3.2 What you must do when instructing someone else

- if a Handsignalman or Pilotman is on duty, or another authorised person is to give instructions to the Driver, you must make certain this person clearly understands what the Driver must be told
- if the necessary instructions have already been given to the Driver, you must tell the Handsignalman accordingly when giving permission for the train to proceed; the Handsignalman need not then stop the train

### 4.3.3 What you must do if the train is to pass at Danger a defective signal in rear of the Signal Box

- if possible, give the required instructions by train-radio or signal-telephone

## 4.0 INSTRUCTIONS TO SIGNALMEN

- otherwise, exhibit a yellow handsignal when the train has stopped at the signal
- the Driver will accept this as authority to proceed as far as the signal box
- this handsignal must not be given if:
  - the train would pass over any points in the facing direction, or
  - there is a risk of another Driver mistaking the handsignal

### 4.3.4 What you must do if the section signal is to be passed at Danger for shunting purposes

- tell the Driver the signal is to be passed at Danger for shunting purposes only
- instruct the Driver not to proceed on the journey until the section signal is cleared or you give authority to proceed

### 4.3.5 When you must issue an Authority Number

- whenever you directly authorise the Driver (whether by radio, telephone or face to face) to pass a Signal at Danger, you must issue an Authority Number, as shown below:

**EXCEPTION:** this does not apply if any of the circumstances in clauses 4.3.2. to 4.3.4 apply or when a shunting movement is to be authorised to pass a position light or shunt signal at Danger/Normal

## 4.0 INSTRUCTIONS TO SIGNALMEN

- having reached a clear understanding with the Driver as to what is required, you must give the following message which the Driver will record on an Authority Form (see page D22):

Train No ..... authorised to pass

Signal No ..... at Danger

and proceed to .....

- ask the Driver to read back what has been entered on the Authority Form (Part A)
- provided you are sure this is correct, you must then give the Driver an Authority Number together with the time
- you must record these details in the Train Register
- if, however, Temporary Block Working applies, you must give the necessary instructions as shown in Track Circuit Block Regulation 11 which the Driver will record on a Temporary Block Working Ticket (see page D23)

## 4.4 DURING THE MOVEMENT

### 4.4.1 Precautions you must take

- do not work any signal control device which has been operated to protect the movement
- do not permit any conflicting movement within the distance required to be kept clear ahead of a wrong direction movement

## 4.0 INSTRUCTIONS TO SIGNALMEN

### 4.4.2 Release of points

- do not permit the release of any points which have been secured until the movement has passed clear of the last points in the route concerned (or track circuit controlling those points)

### 4.5 AFTER THE MOVEMENT HAS PASSED CLEAR

- this clause applies where a signal has been defective or disconnected or a failure of the signalling equipment has occurred and it is now safe to resume normal working
- tell the PO (where provided) to:
  - remove any clip, lock and scotch from the points
  - restore the power supply to the points
  - confirm when all is in order on the site for the PO to leave
- before then authorising the PO to leave, you must check that the points respond correctly

Form No: IE/T68/56



## AUTHORITY TO PASS A SIGNAL AT DANGER

### PART A

 INSTRUCTIONS

**TRAIN NO:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**From:** \_\_\_\_\_ **To:** \_\_\_\_\_

I am authorised to pass Signal No. \_\_\_\_\_ at Danger

and to proceed in accordance with Rule Book, Section D

to \_\_\_\_\_

(insert Signal No. or description of location)

### PART B

 AUTHORISATION

Authority issued by Signalman \_\_\_\_\_

(name)

at \_\_\_\_\_ Signal Box

AUTHORITY NUMBER \_\_\_\_\_ TIME OF ISSUE \_\_\_\_\_

Message received and understood by \_\_\_\_\_

(Driver)

NOTE: This form to be handed in when booking off duty

Form No: R/OP/RBF/001-A





Form No: IE/T68/56



**TEMPORARY BLOCK WORKING TICKET**  
**(to be completed by the Driver at the Signalman's dictation)**

**PART A INSTRUCTIONS**

**TRAIN NO:** \_\_\_\_\_ **Time:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**From:** \_\_\_\_\_ **To:** \_\_\_\_\_

I am authorised to pass Signal No. \_\_\_\_\_ at Danger,  
 to ignore Signal Nos. \_\_\_\_\_  
 and to proceed to Signal No. \_\_\_\_\_ at \_\_\_\_\_  
 where I must STOP and surrender this ticket

I understand that speed must not exceed 80kmh (50mph) and  
 must be reduced to 16kmh (10mph) over ANY FACING POINTS

I am required to approach carefully and check it is safe to pass  
 over level crossings at

\_\_\_\_\_  
 \_\_\_\_\_

I am required to observe the following additional instructions

\_\_\_\_\_  
 \_\_\_\_\_

**PART B AUTHORISATION**

Authority issued by Signalman \_\_\_\_\_ (name)  
 at \_\_\_\_\_ Signal Box

AUTHORITY NUMBER \_\_\_\_\_ TIME OF ISSUE \_\_\_\_\_

Message received and understood by \_\_\_\_\_ (Driver)

Form No: R/OP/RBF/001-B



Not Used

# **SECTION E**

## **OPERATION OF SIGNALLING EQUIPMENT DURING FAILURE OR WHILE WORK TAKES PLACE**

Not Used

## 1.0 PRINCIPLES

### 1.1 IF A FAILURE OCCURS

- the Signaller must report any defect to enable repairs to be arranged without delay
- the Signaller is responsible for ensuring trains pass safely during the time of the failure

### 1.2 IF WORK IS TO BE DONE ON SIGNALLING EQUIPMENT

- the Technician must obtain the Signaller's permission before starting work which will involve the disconnection or affect the operation of signalling equipment
- when a disconnection(s) is necessary, the Technician must arrange this in accordance with the requirements of the relevant signal engineering instructions
- the Signaller must record in the Train Register the details of the signalling equipment affected and any disconnection
- if trains are to pass during the work, the Signaller must observe the appropriate instructions to ensure they do so safely
- the Technician must tell the Signaller when normal working may resume

**NOTE: there are some exceptions to this principle (clause 1.2) when routine maintenance is done**

## 1.0 PRINCIPLES

### 1.3 IF SIGNALLING EQUIPMENT IS TO BE TESTED

- if equipment is to be operated for testing purposes, the Technician must either:
  - ask the Signaller to operate it, or
  - obtain the Signaller's permission to operate it
- the provisions of this Section E do not then apply but the Signaller must find a suitable margin to avoid delays to trains

### 1.4 IF HANDSIGNALMEN ARE REQUIRED

- the Signaller is responsible for appointing any Handsignalmen that are required

## 2.0 SIGNALLING TERMS AND GENERAL INSTRUCTIONS

### 2.1 GLOSSARY

#### 2.1.1 Technician

- this means a competent member of staff of the Signal Engineers' Department

#### 2.1.2 Signalling equipment

- this includes the barriers/gates and associated electrical or mechanical equipment at level crossings
- this also includes equipment not yet commissioned or already taken out of use but only if they may affect:
  - the passage of trains, or

## 2.0 SIGNALLING TERMS AND GENERAL INSTRUCTIONS

- the normal operation of other operational equipment

### 2.1.3 Defective signal

- this means a signal with a fault affecting its designed operation
- this includes a signal where the light is out when it should be illuminated

### 2.1.4 Disconnected signal

- this means a signal which is adjusted to ensure that it shows only its most restrictive aspect for the routes concerned

### 2.1.5 Signal control device

- this includes a lever, switch panel, push-button panel or workstation keyboard, tracker-ball or mouse

### 2.1.6 Correspondence

- this means that the lie (or position) of the points accords with the position of the signal control device

**NOTE:** when this is not the case, the points are considered to be “out of correspondence”

## 2.2 RESPONSIBILITY FOR ARRANGING SIGNALLING WORK

### 2.2.1 Work to be arranged beforehand

- as far as practicable, repair or renewal work must be arranged beforehand

## 2.0 SIGNALLING TERMS AND GENERAL INSTRUCTIONS

- the Engineering Departments must agree with the Operations Department the extent, location and duration of the work

### 2.2.2 Unplanned work

- the Person in Charge of repair or renewal work which has not been pre-arranged must inform the appropriate Operations Department representative

### 2.2.3 Alterations to signals etc

- any alteration to signalling equipment of the type described in Section C (of the Rule Book) must be published in the Notice
- this includes bringing into use, or taking out of use of the equipment
- this also applies to any change in the method of working at a level crossing or ground frame

## 2.3 CIRCUMSTANCES IN WHICH CONTROLS ON SIGNALLING EQUIPMENT MAY BE RELEASED

- when it is necessary to enable a signal control device to be returned to the normal position
- when it is necessary to obtain correspondence between a signal control device and the lie of the point blades
- when the release will enable the normal working of signals for movements which are clear of the failure
- when Single Line Working is to apply and it is necessary to release the block indicator for the affected line
- where equipment is provided for the Signaller's use to enable a signalling control to be released



## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.1 WHAT YOU MUST DO IF THE SIGNALLING EQUIPMENT DOES NOT RESPOND

- if equipment does not apparently respond, make another attempt to operate it
- if this is still unsuccessful, you must consider the equipment as defective unless you can check that it is working properly but only the indication or repeater is defective
- if possible, arrange for a visual check to be made and for any obstructions or blockage to be removed
- you must not interfere with electrical equipment

### 3.2 WHAT YOU MUST DO ON BECOMING AWARE OF A DEFECT IN THE SIGNALLING EQUIPMENT

- take action appropriate to the type of failure
- send for the Signal Technician as prescribed in local instructions and anyone else needed to attend
- explain to them the nature and effect of the failure
- tell Operations Control
- enter the details in the Train Register

### 3.3 WHAT YOU MUST DO WHEN TRAINS ARE REQUIRED TO APPROACH A DEFECTIVE SIGNAL

#### 3.3.1 If the signal controls movements on a running line

- you must not permit a train to approach a defective signal until it is safe to do so

### 3.0 INSTRUCTIONS TO SIGNALMEN

- it is safe for a train to approach a defective signal ONLY when you have ensured that one of the following arrangements applies:
  - (a) - the defective signal has been placed to Danger (or Caution in the case of a distant signal) and the signal is showing the correct aspect/indication
  - (b) - the defective signal is showing a proper proceed aspect/indication appropriate to the extent to which the line ahead of that signal is clear; where necessary, you must have obtained acceptance from the Signaller at the signal box in advance for the train which is to approach the defective signal
  - (c) - the Driver has been informed of the circumstances AND either you have appointed a Handsignaller at the defective signal, OR you have ensured that the line ahead of the defective signal is clear for the required distance (see below)
- the "required distance" in clause (c) is as follows:

Circumstances	Requirement
Defective stop signal on TCB line	Line is clear to and including the overlap of the signal ahead
Defective distant signal on TCB line	Line is clear to and including the overlap of the <u>second</u> stop signal ahead
Dead end line	Line is clear to buffer stops
Defective distant, home or section signal on non-TCB line	Train accepted by Signaller at the signal box ahead
Defective signal is between home and section signals on non-TCB line	Line is clear to section signal

## 3.0 INSTRUCTIONS TO SIGNALMEN

- you must arrange for a Handsignalman to be appointed at the defective signal when clause (c) applies AND it is not practicable to work with the line clear for the required distance as shown
- whenever necessary, you must tell the Signalman in rear to give the necessary information to the Driver of each approaching train
- if you receive such a request from the Signalman at the signal box in advance, you must not then permit any train to proceed towards the signal box where the defective signal is located except as shown in this clause 3.3

**NOTE:** the Driver may be "informed of the circumstances" by the temporary absence of a signal being shown in the Notice

### 3.3.2 If the signal controls movements from a siding

- you must arrange for the Person in Charge of movements to be informed of the circumstances

### 3.3.3 If the normal indication is defective at a position light shunting signal

- you must not permit a movement to approach or be brought within the control of the signal unless:
  - no conflicting movement will take place which requires to be protected by that signal, and
  - the Driver has been informed of the circumstances

## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.3.4 If a repeating signal is defective

- you must not allow a train to approach it unless one of the following arrangements applies:
  - the signal to which the repeating signal applies is showing a proceed aspect/indication and the repeating signal is showing an OFF indication, or
  - the signal in rear of the repeating signal is showing one yellow aspect or a Caution indication and the repeating signal is showing an ON indication, or
  - the Driver has been informed of the circumstances

## 3.4 WHAT YOU MUST DO WHEN TRAINS ARE REQUIRED TO PASS A DEFECTIVE STOP SIGNAL

- you must observe the provisions of Section D before authorising a Driver to pass a defective stop signal at Danger
- this also applies if the train is to pass a stop signal which is temporarily not showing an aspect/indication
- where practicable, the control device of this signal must be operated to maintain the security of the interlocking
- you may clear a subsidiary signal in place of a main signal which is defective or locked at Danger because of a failure of signalling equipment
- in these circumstances, Section D does not apply but you must ensure that the following applies if the train concerned is not normally permitted to enter the section on the authority of a subsidiary signal:
  - the line ahead must be clear in accordance with the conditions normally required to enable the main signal to be cleared

## 3.0 INSTRUCTIONS TO SIGNALMEN

- the Driver is informed of the circumstances

### 3.5 WHAT YOU MUST DO WHEN TRAINS ARE REQUIRED TO PASS OVER DEFECTIVE TRACK CIRCUITS

- you must first check that the portion of line concerned is clear as shown in the Train Signalling Regulations
- if necessary, you must arrange for a competent person to be provided to tell you when the line is occupied and/or when it is clear

### 3.6 WHAT YOU MUST DO IF IT IS NECESSARY FOR YOU TO RELEASE SIGNALLING CONTROLS

- you must not release any electrical locking or controlling devices in connection with signalling equipment except where equipment is provided for your use
- you must use the equipment only in accordance with the relevant instructions

### 3.7 WHAT YOU MUST DO IF IT IS NECESSARY TO REQUEST THE TECHNICIAN TO RELEASE SIGNALLING CONTROLS

#### 3.7.1 Circumstances in which this is permitted

- only as shown in clause 2.3

#### 3.7.2 How to request a release of signalling controls

- first, make sure that any movement(s) for which the release is required can be made safely

### 3.0 INSTRUCTIONS TO SIGNALMEN

- you must then agree with the Technician the details of the points or signals, or the signal routes on which the controls are to be disconnected and the details of the movements which are to take place

**NOTE: if Single Line Working is to apply, tell the Technician which block indicator is to be released**

- you must complete and sign a Signalling Controls Release Form (see page E26), Part A, and hand it to the Technician
- enter the details of the release in the Train Register
- the Technician is required to countersign this entry
- where the Technician is remote from the signal box, you must, instead, dictate the details of the release to enable the Technician to complete a Release Form, Part A
- ask the Technician to read back the completed form and, if correct, you must then enter these details, together with the Technician's name and location, and the time in the Train Register
- the Technician will tell you when the release has been given
- you must complete or dictate a Release Form, Part A, each time a release is required (including when the release concerned has been previously restored)

#### 3.7.3 What you must do before signalling any movement while the release is effective

- make sure the movement will be clear of any obstruction or failure
- check that all points normally locked by track circuits are secured in the correct position
- see that the necessary reminder appliances are in use

## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.7.4 When the release is no longer required

- tell the Technician
- when the release is restored, the Technician will cancel the Release Form by completing Part B and returning it to you
- you must note in the Train Register the cancellation of the Release Form and the restoration of the controls
- when remote from the signal box, the Technician will tell you when the Release Form has been cancelled and will return the form in due course
- you must record this in the Train Register together with the Technician's name and location and the time
- cancelled forms must be sent to the Local Manager

## 3.8 WHAT YOU MUST DO BEFORE PERMITTING WORK ON SIGNALLING EQUIPMENT TO START

**NOTE:** clauses 3.8 to 3.10 apply whenever the Technician is to carry out work on signalling equipment in accordance with the relevant signal engineering instructions but with the exception of certain maintenance work as shown in clause 3.11

### 3.8.1 Agreement with the Technician

- before starting any work which will interfere with the normal operation of signalling equipment, the Technician will agree with you:
  - the number(s) and details of the equipment which will be affected
  - the length of time needed for the work

## 3.0 INSTRUCTIONS TO SIGNALMEN

- the time when permission may be given for the work to start
- the time it must be completed
- which signals (if any) must be disconnected

### 3.8.2 Signals to be disconnected

- at the time agreed with you, the Technician will disconnect those signals as shown in clause 4.1.1
- the Technician will tell you when this has been done

### 3.8.3 Entry in the Train Register

- you must enter in the Train Register details of the signalling equipment which will be affected by the work and the disconnections made by the Technician
- the Technician is required to countersign this entry
- where the Technician is unable to come to the signal box because of the distance involved, you must obtain the Technician's name and location and enter that with the time after the Train Register entry

**NOTE:** if the Technician is later relieved, the relief Technician will countersign the entry or, if remote from the signal box, give you the necessary information for you to enter after the entry

- if the work affects another Signaller in your signal box, you must ensure that this person understands the arrangements and countersigns the entry



## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.9 WHAT YOU MUST DO WHEN WORK ON SIGNALLING EQUIPMENT IS TAKING PLACE

#### 3.9.1 When trains are required to pass

- you must observe the requirements of Section D before authorising a Driver to pass:
  - a disconnected stop signal, or
  - a stop signal temporarily not showing any aspect or indication
- in addition, you must not permit a train to approach any signal temporarily not showing any aspect or indication except as shown in clause 3.3
- during the times that trains are required to pass, you must ensure that a Handsignalman is on duty at any signal temporarily not showing any aspect or indication as shown in clause 3.3.1(c)

#### 3.9.2 Operating signal control devices for the passage of trains

- you must obtain the Technician's permission before operating any control device which operates equipment affected by the work
- where the equipment is disconnected but the interlocking remains in order, you must operate the control device concerned to the appropriate position to obtain the security of the interlocking before authorising any movement
- where this applies, it may be practicable for the Technician to give permission for you to operate the control device(s) concerned throughout the whole time of the work (rather than having to obtain permission each time it is necessary)

## 3.0 INSTRUCTIONS TO SIGNALMEN

- when such permission is given, you must note this in the Train Register when making the entries required by clause 3.8.3

### 3.9.3 Operating signal control devices for testing purposes

- when this is necessary, the Technician will:
  - obtain your permission before operating the control device, or
  - ask you to operate the control device
- the Technician will also obtain your permission before using a pump or crank handle to move points for testing purposes

### 3.9.4 If you are relieving or being relieved

- make sure your relief fully understands the arrangements
- if relieving, you must countersign the Train Register entry

## 3.10 WHAT YOU MUST DO WHEN WORK ON SIGNALLING EQUIPMENT IS COMPLETED

### 3.10.1 When work is fully completed

- the Technician will tell you when work is completed and any disconnections restored
- you must note this in the Train Register
- the Technician is required to countersign this entry
- alternatively, as shown in clause 3.8.3, you must obtain the Technician's name and location and enter that with the time after the Train Register entry

## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.10.2 If only part of the work is completed

- the Technician will tell you if only part of the work is completed and some disconnections restored
- you must note in the Train Register (as shown in clause 3.10.1) the details of:
  - the equipment on which work is completed and the disconnections restored
  - the equipment on which work is continuing and the disconnections remaining

### 3.10.3 Need to check normal working restored

- as far as practicable, you must check (and, if necessary, operate) the signalling equipment which has been affected by the work to see that normal working is fully restored

## 3.11 WHAT YOU MUST DO WHEN ROUTINE MAINTENANCE WORK IS TO BE DONE

### 3.11.1 Work not involving interference with signalling equipment

- the Technician is permitted to carry out such work without reference to you

### 3.11.2 Work which will make signalling equipment inoperative for a short period of time

- the Technician will first tell you what is required
- you must find a suitable margin between trains before giving permission to start
- an entry in the Train Register is not required

### 3.0 INSTRUCTIONS TO SIGNALMEN

**NOTE:** you must check with the Technician that the work comprises only routine maintenance as permitted under this arrangement

### 4.0 INSTRUCTIONS TO TECHNICIANS

**NOTE:** clauses 4.1 to 4.3 apply whenever you are to carry out work on signalling equipment with the exception of certain routine maintenance work as shown in clause 4.4

#### 4.1 WHAT YOU MUST UNDERSTAND ABOUT WORK ON SIGNALLING EQUIPMENT

##### 4.1.1 Concerning planning and organisation of work

**REMINDER:** as far as practicable, work on signalling equipment must be planned and arranged beforehand

- you must obtain the Signaller's permission before starting any work involving a disconnection, isolation or alteration to the signalling equipment
- you must agree with the Signaller:
  - the number(s) and details of the equipment which will be affected
  - the length of time needed for the work
  - the time when permission may be given for work to start
  - the time it must be completed
  - which signals (if any) must be disconnected

## 4.0 INSTRUCTIONS TO TECHNICIANS

- the Signaller is required to enter in the Train Register the details of the signalling equipment which will be affected by the work and the disconnections made
- you must countersign this entry
- alternatively, where it is not practicable to go to the signal box because of the distance involved, you must ask the Signaller to read out the entry
- provided you are sure it is correct, you must then give your name, place from where you are speaking and the time
- the Signaller will enter these details in the Train Register on your behalf
- you must then obtain the Signaller's permission before:
  - changing the agreed arrangements, or
  - operating the signalling equipment for testing purposes
- you must tell the Signaller when the work is completed and tested, and normal working may be resumed

### 4.1.2 When disconnections or alterations are required

- you must ensure that any disconnections required in accordance with signal engineering instructions are made before work starts
- any disconnections or alterations must be made in accordance with these instructions

## 4.0 INSTRUCTIONS TO TECHNICIANS

### 4.1.3 When fault diagnosis is to be carried out

- you must carry out any fault diagnosis and rectification in accordance with signal engineering instructions
- before advising the Signaller that normal working may be resumed, you must:
  - test the completed work
  - record the details of the testing carried out

### 4.1.4 When signalling controls are to be released

- you must ensure that signalling controls are released only in accordance with signal engineering instructions
- you must make such arrangements only in circumstances specified in these instructions

### 4.1.5 When only maintenance work is to be done

- you must obtain the Signaller's permission before carrying out maintenance checks and adjustments if these will require disconnection of the signalling equipment or interfere with its normal working
- if the work will not interfere with the working of the equipment, you need not obtain the Signaller's permission

### 4.1.6 When train movements are to take place

- the Signaller remains responsible for the safe working of any train movements which are to take place while any work as described in clauses 4.1.1 to 4.1.5 is being done

## 4.0 INSTRUCTIONS TO TECHNICIANS

### 4.2 WHAT YOU MUST DO WHEN WORKING ON SIGNALLING EQUIPMENT

#### 4.2.1 Nature and extent of work

- the entry in the Train Register is an agreement between you and the Signaller as to:
  - what work is to be done
  - what equipment will be affected
- you must not alter this system of working unless fresh arrangements are made with the Signaller and another entry is made in the Train Register

#### 4.2.2 If you need to operate a signal control device for testing purposes

- ask the Signaller to do this for you
- alternatively, you may do this yourself but you must first obtain the Signaller's permission
- you must also obtain the Signaller's permission before using a pump or crank handle to move points for testing purposes

#### 4.2.3 If trains are to pass while work is taking place

- the Signaller will obtain your permission before operating any control device which operates any equipment affected by the work
- where disconnection(s) have been made but the interlocking remains in order, the Signaller is required to operate the control device(s) to obtain the security of the interlocking

## 4.0 INSTRUCTIONS TO TECHNICIANS

- when practicable, you may give the Signaller permission to operate a control device(s) throughout the whole time of the work (rather than give permission each time it is necessary) and this arrangement will be noted in the Train Register

### 4.2.4 If you are relieved or are relieving

- make sure your relief fully understands the arrangements
- if relieving, you must countersign the Train Register entry in the presence of the Signaller or ask the Signaller to read back the entry and endorse it on your behalf as shown in clause 4.1.1

## 4.3 WHAT YOU MUST DO WHEN WORK ON SIGNALLING EQUIPMENT IS COMPLETED

### 4.3.1 When work is fully completed

- restore any disconnections
- carry out the necessary testing in accordance with the relevant signal engineering instructions
- check that the equipment is in working order
- inform the Signaller who will make an appropriate entry in the Train Register
- you must countersign this entry
- alternatively, as shown in clause 4.1.1, ask the Signaller to read out the entry and give the information shown in that clause which the Signaller will enter in the Train Register



## 4.0 INSTRUCTIONS TO TECHNICIANS

### 4.3.2 If only part of the work is completed

- observe the previous clause as far as is appropriate
- make sure that the Signaller's Train Register entry includes details of:
  - the equipment on which work is completed and tested and the disconnections which are restored
  - the equipment on which work is continuing and the disconnections remaining

## 4.4 WHAT YOU MUST DO WHEN ROUTINE MAINTENANCE WORK IS TO BE DONE

### 4.4.1 Procedure to be followed

- you must observe the requirements of clauses 4.1 to 4.3 unless:
  - the work will not involve interference with signalling equipment, or
  - the work will make signalling equipment inoperative but only for a short period of time
- if after starting work, you find it cannot be completed in this short period, you must consider the equipment to be defective and observe the requirements of clauses 4.1 to 4.3

### 4.4.2 Before starting routine maintenance work

- if there will be no interference with signalling equipment, you may start work without reference to the Signaller

## 4.0 INSTRUCTIONS TO TECHNICIANS

- otherwise (as shown in clause 4.4.1), you must:
  - inform the Signaller what is required
  - obtain the permission of the Signaller who will find a suitable margin between trains
  - ensure that the Signaller understands that the work is to be done as shown in this clause 4.4
- the Signaller is not required to make an entry in the Train Register

## 4.5 WHAT YOU MUST DO IF IT IS NECESSARY TO RELEASE SIGNALLING CONTROLS

### 4.5.1 Circumstances in which this is permitted

- only as shown in clause 2.3

### 4.5.2 How a request to release signalling controls will be made

- the Signaller will agree with you the details of the points or signals, or the signal routes on which the controls are to be disconnected and the details of the movements which are to take place

**NOTE:** if Single Line Working is to apply, the Signaller will tell you which block indicator is to be released

- the Signaller will complete and sign a Signalling Controls Release Form, Part A (see page E26) and hand it to you
- the Signaller will enter the details of the release in the Train Register

## 4.0 INSTRUCTIONS TO TECHNICIANS

- you must countersign this entry
- alternatively, if you are remote from the signal box, the Signaller will dictate to you these details which you must enter on the Release Form, Part A
- read these details to the Signaller and give your name and location and the time
- the Signaller will enter this in the Train Register

### 4.5.3 How the release must be made

- you must release the necessary signalling controls only in accordance with the relevant signal engineering instructions

### 4.5.4 When the release has been made

- tell the Signaller

### 4.5.5 When the release is no longer required

- the Signaller will tell you when the release is no longer required
- you must restore the controls in accordance with the relevant signal engineering instructions
- you must then cancel the Release Form by completing Part B and hand the form to the Signaller
- alternatively, if you are remote from the signal box, tell the Signaller when you have cancelled the Release Form and give your name and location and the time
- send the cancelled form to the Signaller as soon as convenient

## SIGNALLING CONTROLS RELEASE FORM

### PART A

#### REQUEST FOR RELEASE

Signal Technician \_\_\_\_\_ (name) is requested by the Signalman to disconnect the signalling controls, in accordance with Rule Book, Section E, as follows;

- (1) on \_\_\_\_\_ points/signals or signal route from Signal No. \_\_\_\_\_ to Signal No. \_\_\_\_\_ to permit movements from \_\_\_\_\_ to \_\_\_\_\_ or
- (2) on \_\_\_\_\_ line block indicator in connection with Single Line Working between \_\_\_\_\_ and \_\_\_\_\_

Issued / Dictated by

Signalman \_\_\_\_\_ at \_\_\_\_\_ Signal box

Time / Date \_\_\_\_\_

Signed \_\_\_\_\_ (Signalman issuing form)  
or

\_\_\_\_\_ (Technician at Signalman's dictation)

### PART B

#### CANCELLATION

Controls restored and form cancelled on instructions of Signalman

\_\_\_\_\_ at \_\_\_\_\_ Signal box

at \_\_\_\_\_ time / date

Signed \_\_\_\_\_ (Technician)

**NOTE: This form must be handed or forwarded to the Signalman**

# **SECTION G**

## **LEVEL CROSSINGS**

Not Used

## 1.0 PRINCIPLES

### 1.1 SAFETY

- safety must be the first consideration of everyone involved with the operation of level crossings
- this applies to the safety of trains and the safety of crossing users

### 1.2 DELAYS TO TRAINS

- level crossings must be operated in a manner which avoids delays to trains
- undue delays to crossing users must also be avoided, whenever possible

## 2.0 CLASSIFICATION OF LEVEL CROSSINGS

### 2.1 STANDARD CLASSIFICATION

level crossings are classified as follows:

- AUTOMATIC level crossings, as described in clause 3.1
- MANNED level crossings, as described in clause 3.2
- other level crossings, as described in clause 3.3

### 2.2 APPLICATION OF RULES

- references to level crossings in the Rules and Instructions include AUTOMATIC and MANNED level crossings (as described in clauses 3.1 and 3.2), but NOT those crossings described in 3.3

## 3.0 DESIGNATION OF LEVEL CROSSINGS

### 3.1 AUTOMATIC LEVEL CROSSINGS

- **AHB** - Automatic half-barrier crossing
  - provided with half barriers and steady yellow and flashing red lights for road traffic
  - operated by passage of trains
- **AHB-D** - Automatic half-barrier crossing - distant monitored
  - as AHB above
  - also provided with a Driver's white flashing light
- **LB** - Lights and bells crossing
  - open crossing (no gates or barriers)
  - provided with steady yellow and flashing red lights, together with bells for road traffic
  - operated by passage of trains
- **ML or MSL or MWL**- Miniature warning lights
  - provided with user-worked gates and miniature red and green warning lights for crossing users
  - warning lights operated by passage of trains

**NOTE:** telephones are also provided at AHB, AHB-D and LB crossings, giving communication with the supervising signal box



## 3.0 DESIGNATION OF LEVEL CROSSINGS

### 3.2 MANNED LEVEL CROSSINGS

- **MB** - Manual barrier crossing
  - provided with full barriers and steady yellow and flashing red lights, together with bells for road users
  - operated (together with protecting signals) by Crossing Keeper or Signalman or by the traincrew
- **CCTV** - Closed circuit television crossing
  - provided with full skirted barriers and steady yellow and flashing red lights, together with bells for road users
  - provided with telephone giving communication with the supervising signal box
  - supervised by Crossing Keeper or Signalman from a remote location by use of CCTV (including operation of protecting signals)
  - barriers can be operated by passage of trains or Crossing Keeper or Signalman
- **MWB** - Mechanically worked barrier crossing
  - provided with full barriers (no lights or bells)
  - operated by a Crossing Keeper or traincrew
- **GATED** - (see designations below)
  - provided with gates extending across the line when the crossing is open to road traffic
  - the following designation applies according to whether the gates are required to be kept normally open or normally closed to road traffic:

### 3.0 DESIGNATION OF LEVEL CROSSINGS

- C - gates normally CLOSED to road traffic
- CX - gates normally OPEN to road traffic
- CD - gates normally OPEN to road traffic by DAY and normally closed at other times
- CN - gates normally OPEN to road traffic by NIGHT and normally closed at other times

**NOTE:** the exact times of “DAY” and “NIGHT” are specified locally

### 3.3 OTHER LEVEL CROSSINGS

- U - Unattended crossing
  - provided with gates not extending across the line
  - operated by crossing users
  - gates normally CLOSED to crossing users
- A - Attended crossing
  - as Unattended crossing except that the gates are operated by a Crossing Keeper
- B - Barrow crossing
  - suitable for employee use only, with or without platform trolleys etc
  - may be provided with white warning light operated by passage of trains

## 4.0 INSTRUCTIONS TO PERSONS RESPONSIBLE FOR SAFETY ARRANGEMENTS AT LEVEL CROSSINGS

### 4.1 YOUR RESPONSIBILITY

- to oversee the arrangements to ensure the safety of trains and crossing users at the level crossings for which you are responsible

### 4.2 GENERAL INSTRUCTIONS

- you must ensure that crossings are operated and used correctly and safely
- make sure that the appropriate equipment (including notices) is provided, used properly and kept in good order
- be alert for any changes of use by way of nature and/or frequency which may affect the safety of the crossings and take appropriate action to avoid danger arising

**NOTE:** this includes changes which may be exceptional (i.e. one-off), temporary, seasonal or permanent

- you must ensure that a safety inspection of each crossing is made at not less than the frequencies laid down for the type of crossing
- you must promptly follow up any irregularity reported or observed at crossings and ensure that defective or missing equipment (including notices) is remedied without delay

### 4.3 EXCEPTIONAL MOVEMENTS OVER LEVEL CROSSINGS

**NOTE:** this instruction applies at crossings where neither telephones nor signals worked from the crossing are provided

## 4.0 INSTRUCTIONS TO PERSONS RESPONSIBLE FOR SAFETY ARRANGEMENTS AT LEVEL CROSSINGS

### 4.3.1 Definition

- an EXCEPTIONAL MOVEMENT includes:
  - any vehicle likely to take an unusually long time to pass over the crossing because of its length, height, width, weight or speed
  - any vehicle which might become stuck on the crossing for the same reason
  - any vehicle carrying dangerous substances
  - droves of animals
  - funerals or other processions

### 4.3.2 Arrangements you must make with the crossing user

- you must ascertain beforehand:
  - the nature of the exceptional movement
  - which crossing is to be used
  - the time/date intended for the movement
- make sure you reach a clear understanding with the crossing user as to these requirements, in particular the exact location of the crossing
- tell the crossing user that, on arrival at the crossing, permission to cross the line must then be obtained from the person specially provided to supervise the crossing movement (or the Crossing Keeper, where provided)

## 4.0 INSTRUCTIONS TO PERSONS RESPONSIBLE FOR SAFETY ARRANGEMENTS AT LEVEL CROSSINGS

### 4.3.3 Arrangements you must make for signal protection

- you must appoint a competent person (yourself if necessary) to carry out the arrangements to provide signal protection
- if necessary, this person must be provided with a mobile telephone to enable the controlling Signaller to be contacted from the crossing
- this person must be instructed to:
  - attend at the crossing at the time/date required
  - contact the Signaller from the crossing and arrange for the necessary signal protection before the movement takes place
  - tell the Signaller when the movement is complete and normal working can be resumed
- where a Crossing Keeper is provided, you may instead arrange for a mobile telephone to be provided temporarily to enable the Crossing Keeper to observe these instructions

## 4.4 DEFECTIVE TELEPHONES AT UNATTENDED LEVEL CROSSINGS

### 4.4.1 Need for special arrangements

- where provided, the telephone is essential to the safe working of the crossing
- you must ensure that any defective telephone is repaired as quickly as possible
- in the meanwhile, you must ensure that any necessary additional safeguards are taken to ensure that trains or crossing users are not endangered in the absence of telephone communication

## 4.0 INSTRUCTIONS TO PERSONS RESPONSIBLE FOR SAFETY ARRANGEMENTS AT LEVEL CROSSINGS

### 4.4.2 Arrangements you must make

- make sure immediately that the supervising Signaller is aware of the failure of the telephone
- you must then arrange for the Driver of each approaching train to be instructed to approach cautiously and not pass over the crossing unless it is safe to do so

## 5.0 INSTRUCTIONS TO DRIVERS

### 5.1 WHAT YOU MUST UNDERSTAND ABOUT SIGNALS PROTECTING MANNED LEVEL CROSSINGS

- certain manned level crossings are protected by signals worked by the Crossing Keeper and over which the Signaller has no control
- these signals are identified by a signal number with the prefix X and other letters (e.g. XT123US)
- when cleared, these signals indicate only that it is safe for the train to pass over the crossing(s)
- the clearance of these signals must not be taken as an indication that the line ahead is clear
- where only a distant signal is provided, you must be prepared to stop short of the crossing when a Caution aspect is exhibited
- where a braking distance marker board is provided, you must observe the instructions in Section C

## 5.0 INSTRUCTIONS TO DRIVERS

### 5.2 WHAT YOU MUST UNDERSTAND ABOUT PASSING SIGNALS AT DANGER

- if you are authorised by the Crossing Keeper to pass a signal (as described in clause 5.1) at Danger, Section D does not apply
- instead, you must approach cautiously and not pass over the level crossing(s) until authorised by the Crossing Keeper
- the train may then proceed normally on its journey
- if, however, you are authorised by the Signaller to pass at Danger the signal controlling the entrance to the section in which the crossing(s) is located, you must observe the requirements of Section D throughout the section

Not Used



# SECTION H

## OPERATION OF TRAINS

Not Used

## 1.0 PRINCIPLES

### 1.1 SAFETY

- safety must be the first consideration of everyone involved with the operation of trains

### 1.2 PUNCTUALITY

- every effort must be made to ensure punctual operation and prevent avoidable delays

## 2.0 GENERAL INSTRUCTIONS

### 2.1 RESPONSIBILITIES

#### 2.1.1 Drivers

- the Driver is responsible for the proper working of the train throughout its journey
- the Driver must not start the train or restart from a platform or place where attaching/detaching has occurred without receiving the appropriate handsignal/indication from the Guard or Person in Charge
- where neither a Guard or Person in Charge is required to be provided, the Driver must check that it is safe to do so before starting or restarting

#### 2.1.2 Guards

- the Guard is responsible for checking that it is safe for the train to start or restart and signalling to the Driver accordingly
- the Guard must assist the Driver during the journey if there is an emergency or incident

## 2.0 GENERAL INSTRUCTIONS

### 2.1.3 Persons in Charge

- where provided at a station, depot or yard, the Person in Charge must indicate to the Guard when work on the train is completed and it is ready to depart
- where a Guard is not provided, the Person in Charge is responsible for checking that it is safe for the train to start or restart and signalling to the Driver accordingly

### 2.1.4 Signalmen

- each Signalman must be conversant with the requirements of this Section H where they may affect the signalling of trains

## 2.2 WHEN A TRAIN MAY BE CONSIDERED SAFE TO START

A train may be considered SAFE TO START (as described in this Section H) only when the following requirements have been observed:

- the instructions for the working of the automatic brake are complied with and a brake test has been carried out where required by those instructions
- all vehicles appear safe to travel
- all couplings are properly connected
- all hand/parking brakes are fully released
- all doors are properly closed
- all doors at the ends of a passenger train are fitted where required and locked
- any passengers are cleared from a train (or vehicles) which is not in service

## 2.0 GENERAL INSTRUCTIONS

- all loads, including containers, are properly secured
- all loading or unloading equipment is disconnected and/or well clear
- the load, marshalling and formation of the train are in accordance with instructions
- the Driver has any necessary information concerning the load, length, speed and braking capability of the train
- the necessary head and tail lamps are provided
- any necessary train examination or watering or servicing has been completed

## 2.3 STARTING TIME OF TRAINS

### 2.3.1 Passenger trains

- must not leave any station before the advertised time

### 2.3.2 Freight trains

- may start before the booked time provided:
  - Operations Control has given permission, or
  - delays will not be caused to other more important trains
- this applies to any train not carrying passengers

## 2.4 THE "STATION WORK COMPLETE" SIGNAL

- this signal is given to indicate that:
  - any work on the train at a platform or in a siding is complete

## 2.0 GENERAL INSTRUCTIONS

- any required examination or servicing of the train has been undertaken
- all doors are closed and secured or, in the case of power operated doors, they are ready for closing
- the train is ready to leave (on closure of any power operated doors)
- this signal comprises:
  - an arm raised above the head during daylight with normal visibility, or
  - a white light held steadily above the head at other times, or
  - where its use is authorised, a dispatch bat held above the head

## 2.5 THE "TRAIN READY TO START" SIGNAL

- this signal is given to the Driver to indicate that:
  - station work is complete, as described above
  - it is safe for the train to start
- this signal comprises:
  - a green flag waved above the head in the case of a loaded or empty passenger train, or an arm held above the head in the case of a freight train - during daylight with normal visibility
  - a green light held steadily above the head at other times
- this signal is, instead, given by use of the Guard/Driver bell communication whenever possible

## 2.0 GENERAL INSTRUCTIONS

### 2.6 REQUIREMENT FOR HEAD AND MARKER LIGHTS

#### 2.6.1 On running lines

- the white marker lights at the front of the train must be illuminated at all times
- the headlight must be illuminated at all times except when stabled
- where a FULL/DIM headlight is provided, it must be dimmed during darkness when:
  - approaching signals
  - entering or standing at a station
  - approaching a passing train
  - picking up and/or setting down a Token
  - visibility is impaired by using the full beam
- this clause 2.6.1 also applies when a train is propelled in the right direction

#### 2.6.2 In depots, yards and sidings

- the white marker lights at the front of the train must be illuminated during all movements
- the headlight must not be used, whether moving or stabled
- one red and one white (marker) light may be shown at both ends of a locomotive engaged in shunting duties

## 2.0 GENERAL INSTRUCTIONS

### 2.7 REQUIREMENT FOR TAIL LAMPS

- two red lights must normally be exhibited, by day or night, at the rear of the last vehicle of any train or movement when on a running line
- red lights must not be carried or exhibited at either end of any other vehicle
- during darkness or poor visibility, a red light must also be exhibited at the end of the vehicle facing any train approaching on the SAME line where:
  - vehicles are to be left standing on a running line, or
  - a train is to be shunted to an adjoining running line used by trains in the opposite direction; the headlight and marker lights must be extinguished
- red lights must not be left exhibited on stabled trains or vehicles in dead-end sidings facing trains approaching on an adjacent running line
- this clause 2.7 also applies when a train is propelled in the wrong direction except that a white light (only) must be exhibited at the leading end of the front portion of a divided train when propelled towards the rear portion

### 2.8 PROPELLING

#### 2.8.1 What is meant by “propelling”

- a train or vehicles must be regarded as propelled when pushed by a traction unit
- a traction unit (including a multiple unit) or a push/pull train is ONLY regarded as propelled when pushed dead (i.e. with all vehicles unpowered, whether or not in working order) by another unit which is not operating in multiple with it



## 2.0 GENERAL INSTRUCTIONS

### 2.8.2 Authority for propelling

- a train or vehicle(s) must not be propelled on a running line except as follows:
  - where authorised in the General Appendix
  - within station limits
  - on a Track Circuit Block line, when making a shunting movement under the protection of signals and which will not require to proceed beyond more than one signal exhibiting a main aspect
  - when making a movement through points worked from a ground frame
  - when making a movement of a breakdown train
  - when clearing a disabled train or portion of it from the section
  - when the front portion of a divided train is to set back to the rear portion
  - when setting back from a point of obstruction
  - when setting back after overrunning a platform
  - when setting back after taking the wrong route at a junction
  - when making a movement in connection with Single Line Working or working to and from a point of obstruction
  - when making a movement of an Engineer's train towards, on or from a line under Absolute Possession

## 2.0 GENERAL INSTRUCTIONS

- a propelled movement must only be made in any of the above circumstances when absolutely necessary and it must be confined to the shortest practicable distance

## 2.9 TRACTION UNITS TO BE DRIVEN FROM LEADING CAB

### 2.9.1 Driving from the leading cab

- in the interests of safety of movements and personnel, traction units must be driven from the leading cab when moving on any line (including sidings)
- subject to the precautions specified in clause 3.5.14 being observed, a traction unit may be driven from other than the leading cab as shown below
- where the system bypass switch has been operated on an electric multiple unit train, it must only be driven from the leading cab

### 2.9.2 Authority for driving from other than the leading cab

- during a propelled movement
  - a traction unit may be driven from other than the leading cab if this allows a better view of signals or handsignals
- if the driving controls are defective in the leading cab
  - a traction unit may be driven from another cab but a multiple unit or push/pull train must, where possible, be driven from another forward facing cab
  - the defective traction unit must be taken out of service (or remarshalled where a multiple unit train comprises two or more units) as soon as possible

## 2.0 GENERAL INSTRUCTIONS

- during a shunting movement
  - a light locomotive (single or in multiple), a multiple unit or a push/pull train may be driven from other than the leading cab
  - unless the movement is propelled or the driving cab controls are defective, the movement must ALWAYS be driven from the leading cab when:
    - within a maintenance/servicing/stabling siding or depot, or
    - entering a shed or building, or
    - proceeding onto vehicles, or
    - approaching buffer stops

### 2.10 MOVEMENTS ON LINES UNDER ABSOLUTE POSSESSION

#### 2.10.1 Possession arrangements

- possessions are protected by Detonator Protection at each end and at junctions where other lines join the possession
- Detonator Protection comprises three detonators 20 metres (20 yards) apart and a red banner flag in daylight and clear weather, or a red light (showing in both directions) at all other times
- on single lines, possessions may be protected by the Token (where provided) instead of Detonator Protection
- work sites are indicated by double sided marker boards placed in the five foot
- two flashing red lights, vertically displayed, means ENTRANCE to a work site area

## 2.0 GENERAL INSTRUCTIONS

- two flashing yellow lights, vertically displayed, means EXIT from a work site area

### 2.10.2 Authority for movements

- authority for movements must be obtained from the person shown below:

<b>MOVEMENT</b>	<b>AUTHORITY</b>
Towards possession	Signalman
Entering or within possession	PICOP
Entering or within work site	ES
Leaving work site	PICOP
Leaving possession	Signalman

- this person is required to give this authority (and the necessary instructions) personally whenever practicable; otherwise, a suitable person will be used

**EXCEPTION:**      **the Driver must personally obtain the Signalman's permission before moving towards or leaving a possession**

- the Person in Charge of the Possession (PICOP) is identifiable by a green armlet and the Engineering Supervisor (ES) in charge of a work site by a blue armlet
- only Engineer's trains are permitted to enter a possession

## 2.0 GENERAL INSTRUCTIONS

### 2.11 VEHICLES LABELLED FOR REPAIRS

- Movements of defective vehicles must be restricted according to the label which is applied:

LABEL	RESTRICTIONS
NOT TO GO (Red & White)	No movement is permitted, except: - within a station or sidings as authorised by Maintenance staff, or - where a YARD TO YARD (for repairs) Label is affixed
YARD TO YARD (FOR REPAIRS) (Red & Green)	Only a local movement (as specified) is permitted
CASUALTY REPAIR (White & Blue)	To complete any loaded journey Not to be reloaded To be worked empty to a specified repair shops
FOR REPAIRS (Green)	To complete any loaded journey Not to be reloaded To be sent for repairs
MAY BE HOME LOADED (Green endorsed)	May be reloaded to or towards a specified destination where repairs can be done
DEFECTIVE BRAKE (White endorsed in Red)	Not to be reloaded Brake lever to be secured 'OFF'

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.1 BOOKING ON AND OFF DUTY

- you must book on at the rostered time and place
- when booking on, you must check the Notices posted for your attention
- before booking off, you must check when you must next report for duty
- when booking off, you must leave a full written report of any incident or irregularity

### 3.2 EQUIPMENT YOU MUST HAVE WITH YOU IN YOUR DRIVING CAB

- you must have:
  - a handlamp including red and white aspects (and spare battery and bulb)
  - a current Working Timetable
  - a key for signal telephone boxes
  - a carriage key
  - a signal post replacement key (where required)
  - an emergency kit when you are working a dangerous substances train
  - at least 12 detonators
  - two red flags
  - a track circuit operating device or clip
  - a supply of Authority Forms for Passing Signals at Danger

## 3.0 INSTRUCTIONS TO DRIVERS

- and when working a D.O. train:
  - a first aid kit
  - a watch showing the correct time
  - a gangway door key
  - a train manifest (where required)
  - a supply of Defective Door notices (where required)
  - a mobile telephone (where required)
- you must also have with you the relevant Notices for which you must sign

## 3.3 WHAT YOU MUST DO BEFORE STARTING THE JOURNEY

### 3.3.1 Examination of traction unit

- you must be satisfied that your traction unit is in proper order and correctly equipped
- you must carry out any laid down safety checks
- check that the following are provided as required and any seals, etc, are intact:
  - emergency ladders
  - fire extinguishers
  - track circuit operating devices

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.3.2 Brake test

- when you are required to create air brake pipe pressure or vacuum, you will receive a handsignal given by moving an arm (or red light during darkness or poor visibility) vertically up and down above the shoulder
- alternatively, you will receive the necessary instructions verbally

### 3.3.3 Head and tail lamps, etc

- you must ensure that the required headlights and marker lights are exhibited and any destination blinds are correctly set and illuminated
- you must change the lights as necessary when your train reverses direction
- you must also ensure that the necessary tail lamps are provided at the rear of a light locomotive(s) or locomotive(s) assisting a train in rear

## 3.4 WHAT YOU MUST DO WHEN STARTING THE TRAIN

**NOTE:** this clause applies when:

- starting the journey
- restarting from a station stop
- restarting after attaching or detaching

### 3.4.1 Trains worked by a Guard

- you must receive the "Train Ready to Start" signal from the Guard before starting
- this may be relayed to you by the Person in Charge



## 3.0 INSTRUCTIONS TO DRIVERS

### 3.4.2 D.O. trains with power operated doors

- at a staffed platform, you will receive the "Station Work Complete" signal when the doors are ready for closing
- after the doors are closed properly, you must then receive the "Train Ready to Start" signal from the Person in Charge before starting
- at an unstaffed platform, you must check, before starting, that:
  - the doors are properly closed
  - it is safe for the train to start

### 3.4.3 Other D.O. trains

- you must receive the "Train Ready to Start" signal from the Person in Charge before starting

### 3.4.4 All trains

- when you have received the "Train Ready to Start" signal or you are satisfied it is otherwise safe to start, you must check that any signal applying to the movement is clear, before starting
- you must not move your train towards that signal to await clearance unless authorised by the Signaller or, when in a siding, by the Person in Charge

### 3.4.5 On starting away

- accelerate carefully
- when safe and practicable, look back to see that all is in order

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.5 WHAT YOU MUST DO DURING THE JOURNEY

#### 3.5.1 Where you must ride

- whenever the traction unit is in motion, you must be in the driving cab unless a competent person is present who has the requisite current traction and route knowledge
- on a light locomotive(s) or freight train without a brake van, the Guard will ride in the rear cab (of the leading locomotive) except where required to accompany you in accordance with the Rules

#### 3.5.2 Observance of signals and speed restrictions

- you must obey all signals and speed restrictions applying to your train
- apply defensive driving techniques
- keep a good lookout and be alert for handsignals or any indication of something untoward

**NOTE:** you may disregard a blue/white chequered flag exhibited by a Lookout

- as far as practicable, make sure your train runs punctually
- reduce speed as necessary if signals are not visible at the usual distance because of fog or falling snow, etc.

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.5.3 Efficiency of operations

- you must also have regard to the efficiency of operations and, when possible without detriment to timekeeping, you should:
  - accelerate and decelerate gently
  - maximise coasting with power shut off
  - avoid the unnecessary idling of diesel engines

### 3.5.4 Route knowledge

- if you are to work over any portion of line that you have not signed that you are conversant with, you must first obtain the services of a competent Conductor Driver
- the Conductor Driver is responsible for the safe working of the train and is required to:
  - drive the train if competent to do so, or
  - leave the driving entirely to you but give you the necessary instructions concerning signals, speed restrictions, etc to ensure safe working
- the Conductor Driver is also responsible for observing the requirements of Section K

### 3.5.5 Use of the horn

- you must sound the horn as a warning:
  - when passing a whistle board
  - frequently when approaching an AHB or LB level crossing where a whistle board is provided
  - when approaching or leaving a station where another train is standing on the next adjacent line or siding

## 3.0 INSTRUCTIONS TO DRIVERS

- when approaching and passing shunting operations on the next adjacent line or siding
- when entering or emerging from a tunnel
- frequently when in a long tunnel
- on starting if required to pass a signal at Danger
- when otherwise necessary
- you must also sound the horn as a warning to anyone on or near the line who may be endangered
- give a series of short urgent danger warnings if anyone does not acknowledge your warning and move clear or remains dangerously close to the line concerned
- both tones of a two-tone warning horn must be used to give warnings
- do not use the horn more than necessary for safe and efficient working, especially between 2300 and 0700 hours
- use the horn sparingly when people are nearby, or when in or entering a shed or building, unless someone is endangered

### 3.5.6 Stopping the train

- you must stop the train with care, taking into account all the conditions which are relevant
- observe stop markers where provided on platforms
- in dead-end platforms, where stop markers are not provided, you must stop the train at least 6 metres (6 yards) from the buffer stops

## 3.0 INSTRUCTIONS TO DRIVERS

- in sidings, avoid stopping foul of other sidings as far as practicable
- you must NOT stop the train where not booked to call in order to pick up or set down passengers or staff unless:
  - a Special Stop Order is issued, or
  - special authority is given

### 3.5.7 Train required to stop in section

- if an unscheduled stop is to be made in section, you must stop at the signal or signal box in rear of the section to enable the Guard to agree the arrangements with the Signaller
- after entering the section, you must not:
  - stop within the controls of an AHB or LB level crossing unless it is being locally operated, or
  - pass over any manned level crossing not protected by signals without first ensuring it is safe to do so, or
  - make any unsignalled wrong direction movement other than setting back through ground frame operated points
- on a single or bi-directional line, the train may return to the end of the section where it entered but only provided the Guard has obtained the Signaller's permission before the movement starts
- on a D.O. train, you must:
  - make the arrangements with the Signaller
  - keep in touch with the Person in Charge of an Engineer's train when working in the section
  - make sure the section is cleared by the time agreed

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.5.8 Train entering a Token section

- you must be in possession of the Token (or have been shown it, if it is to be carried on another locomotive on your train) before entering a Token section unless:
  - Working by Pilotman applies, or
  - you are authorised to enter the section to assist a disabled train, or
  - you are authorised to enter a line under Absolute Possession
- when receiving the Token, you must immediately check that it applies to the section you are about to enter
- when picking up and/or setting down a Token by hand, the speed of a non-stopping train must not exceed 16 kmh (10 mph)

### 3.5.9 Train double headed in tandem

- if in charge of the leading locomotive, you are responsible for the observance of signals and the working of the brake
- if in charge of the second locomotive, you must:
  - observe signals as far as practicable
  - be alert for any signal given by the other Driver
  - apply the brake if necessary
- special care must be taken when starting

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.5.10 Train assisted in rear

- this is permitted only in emergency or where specially authorised
- if in charge of the train locomotive, you must first agree with the other Driver a means of communicating (e.g. by handsignal or horn, etc) when you are ready to start or restart
- you must then use this means of communication to indicate to the other Driver when you have checked that any controlling signal is cleared and you are ready to start or restart
- if in charge of the assisting locomotive, you must not start or restart until the Driver of the train locomotive has indicated that it is safe to do so
- if either Driver needs to stop, three or more short blasts on the horn must be given as a signal to the other Driver to stop
- the Driver of the assisting locomotive must:
  - leave the train only at a signal with a telephone, or signal box, or where authorised by the Signaller by train-radio
  - tell the Signaller when having left the train
  - not pass any signal cleared for the train until replaced to Danger and cleared again

### 3.5.11 Train entered loop or passed clear of running lines

- if your train has not already passed the signal box, you must immediately tell the Signaller when it has arrived complete with tail lamps attached and is clear of the running line when:
  - it has entered a loop or siding, or

### 3.0 INSTRUCTIONS TO DRIVERS

- it is shunted clear of the running line on which it arrived
- you must obtain the necessary assurance from the Guard (where provided)
- this instruction does not apply on a Track Circuit Block line

#### 3.5.12 Train to make a shunting movement

- where a Guard or Shunter is provided, the movement must be controlled as shown in Section J

#### NOTE FOR IRISH RAIL STAFF

**A Shunter is not required where movements are Driver only operated, the Driver is driving from the leading end and there is no requirement to attach/detach vehicles using manual couplings**

- where the train is not accompanied by a Guard or Shunter, you are entirely responsible for the safety of the movement
- on a running line, speed must not exceed what is appropriate for the controlling signal
- in depots, yards or sidings, speed must not exceed 8 kmh (5 mph)
- before passing over any hand points facing to the movement, you must check that they are correctly set and properly fitting
- before making an unsignalled movement over any worked points, you must obtain permission from the Signaller or Ground Frame Operator and check that the points are correctly set
- where necessary, you must tell the Signaller or Ground Frame Operator when the movement has passed clear of points which require to be moved



## 3.0 INSTRUCTIONS TO DRIVERS

### 3.5.13 Train to be propelled

- propelled movements on running lines are permitted only as shown in clause 2.8.2
- the movement must be controlled by the Guard or Shunter (or Person in Charge in the case of a D.O. train) riding in the leading suitable position in the train or being positioned on the ground
- you must ensure that any signals applicable to the movement are observed
- before starting, you must:
  - reach a clear understanding with the person controlling the movement as to how and from where it will be controlled
  - change the head and marker lights as necessary
- when starting, you must sound the horn
- during the movement, you must:
  - proceed cautiously, not exceeding the speed which will enable it to be stopped within the distance that the person controlling it can see to be clear
  - sound the horn when approaching a station or level crossing in addition to the normal requirements of clause 3.5.5
  - ensure it is safe to do so before passing over any level crossing
  - proceed with extreme caution when entering a dead-end or occupied platform line

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.5.14 Train to be driven from other than the leading cab

- such movements (whether on a running line or siding) are permitted only as shown in clause 2.9.2
- the movement must be controlled by the Guard or Shunter (or Person in Charge in the case of a D.O. train) as shown in Section J
- if, however, the movement is to take place on a running line, you must observe the instructions in clause 3.5.13

### 3.5.15 Train moving on passenger platform line

- when there are two (or more) trains on a passenger platform line, you must not follow a departing train towards the platform starting signal until:
  - the departing train has passed beyond that signal and it has been replaced to Danger and cleared again, or
  - you are authorised by the Signaller to move towards that signal to await its clearance
- this also applies to a light locomotive which is to follow a departing train
- you must not make any setting back movement (or on a bi-directional or dead-end line, any movement in either direction), even for a short distance, unless:
  - the signal is cleared for the movement, or
  - the Signaller's permission is obtained (in which case, you must advise the Signaller when the movement is completed)

**NOTE:** this does not apply to movements simply to enable coupling or uncoupling

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.5.16 Train to pass over level crossing operated by traincrew

- you must stop your train short of the crossing (or at the protecting signal or other designated place) to enable the Guard to alight and go to the crossing
- you must not pass over the crossing until authorised by the Guard
- you must not continue on the journey until the Guard has reopened the crossing to road traffic and rejoined the train

### 3.5.17 Engineer's train to enter or move within a possession

- you must not make any movement unless you or the Guard has obtained authority for the movement from the PICOP, ES or Signalman, as shown in clause 2.10.2
- you must not pass any signal at Danger within the possession unless authorised by the PICOP or ES
- when making a movement within a possession you must:
  - disregard the normal meaning of any signal showing a proceed aspect
  - observe the provisions of Section D
  - be alert for any handsignal requiring you to stop
- if the movement is detained other than within a work site, you must arrange for a red light to be exhibited at the front and headlights extinguished

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.5.18 Engineer's train to load or unload materials

- the Guard will tell you when the Engineer's Person in Charge is to take control of movements involving loading or unloading materials and when such movements are finished
- before starting such movements, you must sound the horn as an acknowledgement and a warning
- you must maintain a uniform speed not exceeding 8 kmh (5 mph)

## 3.6 WHAT YOU MUST DO IF AN IRREGULARITY OR EXCEPTIONAL INCIDENT OCCURS

### 3.6.1 If you observe something which might endanger trains

- if your train may be endangered, you must stop immediately
- if other trains may be endangered, you must:
  - sound the horn
  - exhibit a red light or red handsignal towards approaching trains and, where provided, exhibit the emergency headlights
  - carry out the Emergency Protection procedure in accordance with Section M on the affected line(s)

**NOTE:** you must also do this whenever a cow, bull, horse, sheep or other large animal is within the boundary fence, even if not immediately endangering trains

## 3.0 INSTRUCTIONS TO DRIVERS

- in all circumstances, tell the Signaller by the quickest possible means unless you observe something not of immediate danger to trains, in which case tell the Signaller as soon as convenient
- when booking off, you must leave a full written report of any irregularity or incident

### 3.6.2 If your train is in distress

- if you cannot control the speed of your train or need to alert anyone to an emergency, give the "Train in Distress" warning
- do this by giving a series of long blasts on the horn and by using the emergency headlights (where provided)
- if you require the Guard to apply brakes, use the Guard/Driver communication system or give three or more short blasts on the horn

### 3.6.3 If your train explodes detonators

- if a detonator(s) is exploded together with a yellow handsignal waved slowly from side to side, you must understand that an emergency speed restriction has been imposed
- if a detonator(s) is exploded at a distant signal together with a yellow handsignal held steadily, you must:
  - understand that the next signal is at Danger
  - be prepared to stop at it

### 3.0 INSTRUCTIONS TO DRIVERS

- if a detonator(s) is exploded in any other circumstances, you must:
  - stop immediately
  - contact the Signaller and ascertain the circumstances
  - if this is not possible, proceed at extreme caution towards the obstruction or handsignal indicating what is required

**EXCEPTION: if a detonator(s) is exploded at a signal box or is exploded together with a red handsignal, you must NOT proceed until authorised**

#### 3.6.4 If your train stops out of course

- in an emergency, try to avoid stopping on viaducts, in tunnels or where it may be difficult to deal with the emergency
- when stopping at a signal, try to avoid stopping a passenger train on bridges or viaducts without high parapets
- avoid stopping on or near catch or spring points, but if this happens, make sure it is safe to restart before doing so
- if you notice an unexplained brake application when in charge of a passenger train, you must ascertain from the Guard whether the Passenger Communication Apparatus (PCA) has been operated
- if the PCA is operated on a train where the stopping of the train remains under your control, you must stop at the first suitable location, as described above

### 3.0 INSTRUCTIONS TO DRIVERS

- you must, however, stop immediately if:
  - the PCA is operated when leaving a platform, or
  - there is any indication that the train may be derailed
- if in charge of a D.O. train, you must also ascertain the circumstances and observe the instructions in clause 4.6.8
- you must obtain the "Train Ready to Start" signal from the Guard or, in the case of a D.O. train, make sure it is safe to do so before restarting a passenger or empty coaching stock train at:
  - a station platform, or
  - signals, where detained an unusually long time, or
  - a location where there has been an accident or exceptional incident
- if in charge of a D.O. passenger train, you must keep passengers informed of delays
- if in charge of a freight train (or other train comprising screw-coupled vehicles), which has come to a sudden stop for any reason, you must check whether buffer locking or other damage has occurred before restarting
- after restarting any train which has stopped out of course on the approach to an automatic level crossing, you must approach cautiously and not pass over the crossing without first ensuring it is safe to do so

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.6.5 If your train stops short at a platform

- you must obtain the Guard's permission to draw forward if any part of a passenger or empty carriage train is at the platform and the doors are not under your control
- otherwise, you may draw forward without further delay

### 3.6.6 If your train over-runs a platform

- you may only set back provided:
  - the over-run is less than 400 metres ( $\frac{1}{4}$  mile), and does not include an automatic level crossing
  - you can obtain the Signalman's permission to do so
- where there is any other type of level crossing within the over-run, you must first make sure it is safe to set back over the crossing
- tell the Guard (where provided) what is to be done and whether you require any assistance
- the setting back movement must be:
  - driven from the leading end, if it comprises a multiple unit or push/pull train, or
  - conducted by the Guard or a competent person if a locomotive hauled train is to be propelled
- where it is not permitted or not possible to set back, you must inform Operations Control of the circumstances so that arrangements can be made for the passengers affected



## 3.0 INSTRUCTIONS TO DRIVERS

### 3.6.7 If your train is to pass over a level crossing where there is a failure or incident

- if told by the Signaller that there is a failure or incident affecting a level crossing, you must approach the crossing cautiously and be prepared to stop short of it

**NOTE:** this also applies where, because of a failure, it is not possible to warn the Crossing Keeper of the approach of trains at a crossing which is normally open to road traffic

- you must obtain authority to pass over the crossing from the Crossing Keeper (unless the protecting signal, where provided, is cleared) or Emergency Operator where you are told one is present
- otherwise, you must ensure it is safe to do so before the train passes over the crossing

**EXCEPTION:** if the failure or incident affects an AHB, AHB-D or LB crossing, and an Emergency Operator is not on duty, you must instruct the Guard (or competent person specially provided for this purpose on a D.O. train) to alight at the crossing and indicate when it is safe for the train to pass over the crossing

### 3.6.8 If instructed by the Signaller to examine the line

- make sure you clearly understand what is required
- arrange for the Guard or other employee to accompany you if:
  - it is during darkness or poor visibility
  - the portion of line affected is in a tunnel which is not illuminated

## 3.0 INSTRUCTIONS TO DRIVERS

- proceed cautiously over the portion of line concerned, prepared to stop short of any obstruction
- observe the Signaller's instructions
- observe the provisions of Section D if required to pass a signal at Danger
- after passing through the section, tell the Signaller whether the line is clear or anything else relevant

### 3.6.9 If a passenger falls from your train

- if you become aware that a passenger has (or may have) fallen from your train, you must stop immediately but try to avoid stopping the train in a tunnel or on a viaduct or other unsuitable place
- contact the Signaller by train-radio, if possible, and request assistance for the passenger and, where necessary, signal protection on the other line(s)
- if there is any delay in arranging the required signal protection, you must carry out Emergency Detonator Protection (in accordance with Section M) on the other line(s)
- the Guard will indicate when the train is ready to restart
- on a D.O. train, you must:
  - before restarting, ensure that the door from which the passenger fell is secured out of use
  - make a full note of the details of the door concerned and, if possible, obtain the name and address of any witnesses

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.6.10 If you need to work on the outside of your train

- if you (or the Guard) need to work on or attend to the outside of your train because of a failure or irregularity, you must first be sure it is safe to do so
- if necessary, you must arrange with the Signalman for the passage of trains to be stopped on the adjacent line(s) before starting work and then place a track circuit operating device on the line(s) concerned to supplement the signal protection
- tell the Signalman when normal working may resume and remove the track circuit operating device(s)

**REMINDER:**      **do not climb above floor or solebar level on any vehicle on an electrified line unless an emergency isolation has been arranged**

### 3.6.11 If your train encounters floods

- if the line is flooded, you will be so informed and told whether you may proceed at normal or reduced speed
- if you unexpectedly encounter flooding, you must reduce speed as far as practicable and tell the Signalman as soon as possible
- if trains may be endangered, you must observe the instructions in clause 3.6.1

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.6.12 If a failure or irregularity occurs concerning ATP, CAWS, AWS or TPWS equipment

- traction units may be equipped with one or more of the following systems:
  - ATP (Automatic Train Protection)
  - CAWS (Continuous Automatic Warning System)
  - AWS (Automatic Warning System)
  - TPWS (Train Protection and Warning System)
- separate instructions are issued concerning the operation of these safety systems and the action you must take if there is a failure or irregularity when in service (or when entering service)
- you must observe those instructions whenever such a failure or irregularity occurs

### 3.6.13 If the Driver's Safety Device fails

- tell the Signaller and Operations Control as soon as possible
- arrange for the traction unit to be taken out of service immediately or as soon as possible
- arrange for a suitable employee to accompany you throughout any further movement
- break the seal of the safety control equipment in that person's presence
- demonstrate how to shut off power and apply the brakes
- observe the instructions in the Driver's Manual
- retain the broken seal and hand it in when booking off

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.6.14 If the speedometer fails

- reduce speed enough to be certain of observing all speed restrictions
- tell the Signaller and Operations Control as soon as possible
- arrange for the traction unit to be taken out of service immediately, or as soon as possible

### 3.6.15 If the horn fails

- if it fails completely, tell the Signaller
- arrange for the traction unit to be taken out of service immediately, or as soon as possible
- proceed at reduced speed meanwhile
- if a partial failure occurs, arrange for the train to be taken out of service at the first suitable place without causing delay or cancellation

### 3.6.16 If serious wheel slip or wheel slide occurs

- if serious or prolonged wheel slip or wheel slide occurs, tell the Signaller so that the rails can be examined
- if slipping is severe, tell the Signaller immediately, stopping specially if necessary
- if serious wheel slip occurs, you must also arrange for the traction unit to be examined by the Maintenance staff as soon as possible

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.6.17 If a vehicle defect occurs

- you must report any defects on your traction unit which arise in running in the log card and in the "Defects" book
- serious defects must be reported specially to your supervisor
- if you become aware of a defective vehicle on a D.O. train, tell the Maintenance Staff as soon as possible
- if those staff are not available and you have any doubt whether it is safe for the vehicle to continue its journey, you must:
  - tell the Person in Charge, if available, or
  - arrange for the vehicle to be detached from the train
- if the driving controls become defective in the leading cab, you must observe the instructions in clause 3.5.13

### 3.6.18 If a head or marker light fails

- provided the headlight is operative, the train may continue normally to the first place where it can be taken out of service without causing cancellation or delay
- if the headlight is inoperative, the train must be taken out of service immediately or it may proceed as shown below to the first place where it is practicable to be taken out of service:
  - speed not to exceed 32 kmh (20 mph) during darkness or poor visibility
  - frequent use of the horn to be made when approaching level crossings and places where persons are likely to be on or near the line

## 3.0 INSTRUCTIONS TO DRIVERS

- a white light (a handlamp, if necessary) to be provided if there is a complete failure of head and marker lights

### 3.6.19 If a tail lamp fails

- if one lamp fails, the train may continue but the defective lamp must be replaced as soon as possible
- if both lamps fail, you must arrange for a red light (a handlamp, if necessary) to be provided before the train continues

### 3.6.20 If a Track Circuit Assistor (TCA) fails

- you must comply with the following restrictions on the working of trains with a defective TCA:

#### defect on any vehicle

- must not enter service from a Maintenance Depot

#### defect not affecting first or last vehicle

- may continue normally in service
- must not re-enter service from a Maintenance Depot
- may re-enter service from any other location
- normal train signalling regulations apply

#### defect affecting first or last vehicle

- must be taken out of service as soon as possible
- must then only be worked to a Maintenance Depot for repair
- subject to special signalling regulations for all movements

### 3.0 INSTRUCTIONS TO DRIVERS

- if a defect occurs during the journey, you must:
  - tell the Signaller as soon as possible
  - check whether the first or last vehicle is affected and tell the Signaller accordingly
  - proceed as shown above, observing any instructions given by the Signaller
- if you need to stop specially to check which vehicle is involved:
  - continue at normal speed to the first suitable location
  - approach cautiously and do not pass over any automatic level crossing without first ensuring it is safe to do so
- if working a train (not in service) to a Maintenance Depot for repairs to a TCA on the first or last vehicle, you must tell the Signaller before the journey is resumed or starting from a siding

**NOTE:** reference to Maintenance Depot means a depot with the appropriate specialised equipment to repair TCAs



## 3.0 INSTRUCTIONS TO DRIVERS

### 3.7 WHAT YOU MUST DO WHEN LEAVING YOUR TRAIN

#### 3.7.1 Leaving a train unattended

- you must not leave a traction unit unattended unless:
  - it is in accordance with the programmed working, or
  - another competent person is to take charge of it immediately, or
  - it is necessary to carry out the Rules, or
  - it is stabled in a siding, depot or authorised place, or
  - it is absolutely necessary

#### 3.7.2 Securing your train

- when leaving your train, you must:
  - apply the hand/parking brakes
  - remove the forward/reverse key (where appropriate)
  - observe the appropriate instructions for the traction unit concerned

#### 3.7.3 When relieved

- you must give the relieving Driver any information necessary concerning the train to ensure it continues safely on its journey
- this includes any defect or irregularity which may affect the working of the train

## 4.0 INSTRUCTIONS TO GUARDS

### 4.1 BOOKING ON AND OFF DUTY

- you must book on at the rostered time and place
- when booking on, you must check the Notices posted for your attention
- before booking off, you must check when you must next report for duty
- when booking off, you must leave a full written report of any incident or irregularity

### 4.2 EQUIPMENT YOU MUST HAVE WITH YOU ON YOUR TRAIN

- you must have:
  - a whistle
  - a watch showing the correct time
  - a handlamp with white, green and red aspects (and spare battery and bulb)
  - a red flag and a green flag
  - at least 12 detonators
  - a hand-portable radio (GDC compatible) (where required)
  - a current Working Timetable
  - a signal post replacement key (where required)
  - a lineside telephone box key
- and, when working a passenger train:
  - a carriage key

## 4.0 INSTRUCTIONS TO GUARDS

- a gangway door key
- a first aid kit
- a supply of Defective Door notices (where required)
- you must also have with you the relevant Notices for which you must sign

### 4.3 WHAT YOU MUST DO BEFORE STARTING THE JOURNEY

- before starting your journey or restarting after attaching or detaching vehicles, you must make sure it is safe to do so
- you must be sure that all the requirements of clause 2.2 are met except that the Driver is responsible for the headlights
- when you require the Driver to create air brake pressure or vacuum, you must give a handsignal by moving your arm (or red light during darkness or poor visibility) vertically up and down above your shoulder
- alternatively, you may give the necessary instructions verbally

### 4.4 WHAT YOU MUST DO WHEN STARTING THE TRAIN

- first, make sure that:
  - station work is complete
  - all doors (whether slam or power operated) are properly closed
  - it is safe for the train to start

## 4.0 INSTRUCTIONS TO GUARDS

and where practicable:

- any signal applying to the starting of the train has been cleared
- at a staffed platform where the Person in Charge is present, you must receive the "Station Work Complete" handsignal and must not close any power operated doors before this signal is received
- you may then give the "Train Ready to Start" signal to the Driver
- if you are working a train with a brake van, give this signal from the brake van where you are riding
- you may, however, give this signal from elsewhere if your duties on the train require it or you can obtain a better view of the train
- if you are to use a handsignal instead of the Guard/Driver bell, you must prearrange this with the Driver

## 4.5 WHAT YOU MUST DO DURING THE JOURNEY

### 4.5.1 Where you must ride

- you must normally ride in the most convenient brakevan when your duties do not require you to be elsewhere
- on a light locomotive(s) or freight train without a brakevan, you must ride in the rear cab (of the leading locomotive) except where you are required to accompany the Driver in accordance with the Rules

## 4.0 INSTRUCTIONS TO GUARDS

### 4.5.2 Brake vans on passenger trains

- unattended brake vans must be locked
- unauthorised persons must not be allowed in any brakevan

### 4.5.3 Being alert

- you must remain alert to the progress of the train
- you must keep passengers informed of delays
- if safe and practicable, look out when starting from stations and approaching dead-end platforms or terminals

### 4.5.4 Passing through the train

- where practicable, you must pass through the train from time to time to check that:
  - all is in order
  - the lighting, heating and air conditioning are working satisfactorily
  - aisles, gangways and doorways are clear of obstructions which might impede exit in emergency

### 4.5.5 Passenger trains making unauthorised stops

- you must not stop the train where not booked to call in order to pick up or set down passengers or staff unless:
  - a Special Stop Order is issued, or
  - special authority is given

## 4.0 INSTRUCTIONS TO GUARDS

### 4.5.6 Use of public address system

- where provided, use the system to give information about calling points and connections etc, when:
  - about to depart from principal stations
  - about to arrive at a station where the train is booked to call
- use the system, when practicable, to give information required in clause 4.5.7

### 4.5.7 Warning passengers about short platforms

- where practicable, tell passengers beforehand if the train cannot be fully accommodated at the platform
- say whether passengers should move along the train or wait until it is drawn forward

### 4.5.8 Train required to stop in section

- if the train is to make an unscheduled stop in section, you must agree with the Signaller before entering the section the time by which the line must be clear
- you must ensure that the section is cleared by the agreed time
- you must keep in touch with the Person in Charge of an Engineer's train when working in the section

## 4.0 INSTRUCTIONS TO GUARDS

- you must not authorise any unsignalled wrong direction movement unless:
  - the train is to set back through ground frame operated points where a signal is not provided, or
  - the train is to return to the end of the section where it entered on a single or bi-directional line, in which case you must obtain the Signalman's permission before the movement starts

### 4.5.9 Train to make a shunting movement

- you must control the movement as shown in Section J

### 4.5.10 Train to be propelled

- propelled movements on running lines are permitted only as shown in clause 2.8.2
- you must control the movement as shown in Section J
- before starting, you must:
  - reach a clear understanding with the Driver as to how and from where the movement will be controlled
  - arrange for the required head and tail lights to be provided; the Driver will change the locomotive lights as necessary
  - ensure that sufficient brakes are applied on the leading vehicles if the line is on a falling gradient and the automatic brake is not in use
- during the movement, you must:
  - keep a good lookout
  - observe signals

## 4.0 INSTRUCTIONS TO GUARDS

- warn anyone on or near the line
- where practicable, sound the horn as necessary
- handsignal to the Driver as necessary
- be prepared to apply the brake valve when riding in a vehicle
- check that it is safe to pass over any level crossing before indicating to the Driver accordingly
- alight and go to the crossing for this purpose if you are riding in the train in other than the leading vehicle

### 4.5.11 Train to be driven from other than the leading cab

- such movements (whether on a running line or siding) are permitted only as shown in clause 2.9.2
- you must control the movement as shown in Section J
- if, however, the movement is to take place on a running line, you must observe the instructions in clause 4.5.10

### 4.5.12 Train to pass over level crossing operated by traincrew

- you must close the crossing to road traffic and indicate to the Driver when it is safe for the train to pass over the crossing
- when the train has passed clear of the crossing, you must reopen the crossing to road traffic before restarting the train on its journey



## 4.0 INSTRUCTIONS TO GUARDS

### 4.5.13 Engineer's train to enter or move within a possession

- you must not signal to the Driver to make any movement unless authority has been obtained from the PICOP, ES or Signaller as shown in clause 2.10.2
- you must not signal to the Driver to pass any signal at Danger within the possession unless authorised by the PICOP or ES
- you must be alert for any handsignal requiring you to signal to the Driver to stop

### 4.5.14 Engineer's train to load or unload materials

- movements involving loading or unloading materials may be controlled by the Engineer's Person in Charge
- you must tell the Driver when this arrangement is to apply and when it is finished
- while it applies, you must assist the Person in Charge with the control of movements

## 4.6 WHAT YOU MUST DO IF AN IRREGULARITY OR EXCEPTIONAL INCIDENT OCCURS

### 4.6.1 If you observe something which might endanger trains

- if practicable, tell the Driver immediately
- otherwise, give the emergency bell signal (6 or more beats) on the Guard/Driver bell system
- if you cannot stop the train when you consider it necessary, exhibit a red handsignal to the Driver: when passing any employee on the lineside or signal box, station or yard, exhibit a red handsignal waved slowly from side to side

## 4.0 INSTRUCTIONS TO GUARDS

- if the circumstances do not justify stopping the train, report the details at the first suitable opportunity

### 4.6.2 If your train stops out of course

- make sure that passengers do not get out unless it is necessary
- you must make sure it is safe to restart and give the "Train Ready to Start" signal to the Driver if a passenger or empty coaching stock train stops out of course at:
  - a station platform, or
  - signals, where detained an unusually long time, or
  - a location where there has been an accident or exceptional incident

### 4.6.3 If your train stops short at a platform

- before drawing forward, the Driver is required to obtain your permission if any part of a passenger or empty coaching stock train is at the platform and the doors are not under the Driver's control
- you must not give this permission until safe to do so and you have warned any passengers who might be endangered

## 4.0 INSTRUCTIONS TO GUARDS

### 4.6.4 If your train over-runs a platform

- if a passenger or empty coaching stock train over-runs a platform where it is booked to call by not more than 400 metres ( $\frac{1}{4}$  mile), the Driver will make arrangements in certain circumstances to set back
- the Driver will advise you when this is to be done, in which case you must give any necessary assistance
- you must also warn any passengers who may endanger themselves

### 4.6.5 If your train is to pass over a defective automatic level crossing

- if an Emergency Operator is not on duty at the crossing, the Driver will require you to alight at the crossing and indicate when it is safe to proceed
- you must take care not to give any signal which could be mistaken by a road user

**NOTE:** this applies at AHB, AHB-D or LB crossings

### 4.6.6 If you become aware of a defective vehicle

- tell the Maintenance staff as soon as possible
- if those staff are not available and you have any doubt whether it is safe for the vehicle to continue its journey, you must:
  - tell the Person in Charge, if available, or
  - arrange for the vehicle to be detached from the train

## 4.0 INSTRUCTIONS TO GUARDS

### 4.6.7 If a passenger falls from your train

- if you become aware that a passenger has (or may have) fallen from your train, you must immediately arrange for it to be stopped
- tell the Driver so that train-radio (or other means) can be used to arrange assistance for the passenger and, where necessary, signal protection on the other line(s)
- give the Driver any necessary assistance
- before restarting the train, you must ensure that the door from which the passenger fell is secured out of use
- you must make a full note of the details of the door concerned and, if possible, obtain the name and address of any witnesses

### 4.6.8 If the Passenger Communication Apparatus (PCA) is operated

- you must be alert for the operation of the PCA
- if you think the PCA may have been operated but not noticed by the Driver, you must, if necessary, stop the train by using your brake valve
- if the PCA is operated, you must ascertain by whom, from where and why
- if there is an emergency, you must make whatever arrangements are necessary as quickly as possible
- if the PCA has been misused, you must, if possible, obtain the names and addresses of those involved
- you must reset the PCA before the train continues its journey

## 4.0 INSTRUCTIONS TO GUARDS

### 4.7 WHAT YOU MUST DO WHEN LEAVING YOUR TRAIN

#### 4.7.1 Relief arrangements

- you must not leave your train unless properly relieved by another Guard or authorised person unless:
  - it has arrived at its destination, or
  - you have to work another train immediately, or
  - you have to accompany the Driver while the locomotive runs round or is changed, or
  - you are leaving the train in accordance with the Rules

#### 4.7.2 Heating and lighting

- you must switch off the heating and lighting in the brakevan unless it will be used again immediately

## 5.0 INSTRUCTIONS TO PERSONS IN CHARGE

**NOTE:** you must be currently certificated as competent to undertake duties concerning the starting of trains as shown in this clause 5

### 5.1 PROVISION OF GUARDS ON D.O. TRAINS

- you must arrange for the Driver to be told whenever a Guard is to be provided on a train which is booked to be worked without one

### 5.2 WHAT YOU MUST DO BEFORE AUTHORISING A D.O. TRAIN TO START ITS JOURNEY

- you must observe the instructions in clause 4.3 before a D.O. train starts its journey or restarts after attaching or detaching vehicles
- alternatively, you may permit a freight train to proceed provided you have a signed notification that those instructions have, instead, been carried out by a competent person, nominated to perform those duties on the train concerned

### 5.3 WHAT YOU MUST DO WHEN STARTING A TRAIN FROM A PLATFORM

#### 5.3.1 Trains worked by a Guard

- you must give the "Station Work Complete" signal to the Guard when:
  - station work is complete
  - all doors are properly closed or, in the case of power-operated doors, they are ready for closing
- when the Guard has given the "Train Ready to Start" signal, you must relay this to the Driver where necessary

## 5.0 INSTRUCTIONS TO PERSONS IN CHARGE

### 5.3.2 D.O. trains with power-operated doors

- you must give the "Station Work Complete" signal to the Driver when:
  - station work is complete
  - the doors are ready for closing
- you must then check that:
  - all doors are properly closed
  - it is safe for the train to start
- you may then give the "Train Ready to Start" signal to the Driver

### 5.3.3 D.O. trains with slam doors

- you may give the "Train Ready to Start" signal for the Driver when:
  - station work is complete
  - all doors are properly closed
  - it is safe for the train to start

### 5.3.4 Where a signal applying to the starting of the train is provided

- where practicable, you must check that this signal has been cleared before giving any signal to the Guard or Driver concerning the starting of any train

## 5.0 INSTRUCTIONS TO PERSONS IN CHARGE

### 5.4 WHAT YOU MUST DO WHEN STARTING A TRAIN FROM A SIDING, ETC.

- you must tell the Guard when any work on the train is completed
- in the case of a D.O. train, you may give the "Train Ready to Start" signal to the Driver when:
  - work on the train is completed
  - the train is properly prepared
  - it is safe for the train to start
- clause 5.3.4 also applies



# SECTION J

## SHUNTING

Not Used

## 1.0 PRINCIPLES

**NOTE:** these instructions apply to shunting movements controlled by a Shunter. (movements that do not require a Shunter must be made in accordance with Section H)

### 1.1 SHUNTING TO BE CARRIED OUT SAFELY

- care must be taken to ensure the safety of shunting movements and everyone involved

### 1.2 CONTROL OF MOVEMENTS

- before shunting starts, the Shunter and Driver must reach a clear understanding as to:
  - what movements are required
  - how those movements will be controlled
- the Driver must then work ONLY to the instructions of the Shunter and must not make any movement unless authorised by the Shunter

### 1.3 PREVENTION OF ACCIDENTS

- particular care must be taken during shunting to prevent:
  - accidents to personnel resulting from a misunderstanding as to what is to be done
  - derailments resulting from a failure to check that points are correctly set and properly fitting
  - heavy impacts with vehicles or buffer stops resulting from a failure to control the speed of a movement
  - collisions resulting from a failure to ensure vehicles are not left unsecured or standing foul of other vehicles

## 2.0 DEFINITION AND GENERAL INSTRUCTIONS

### 2.1 DEFINITION

#### 2.1.1 Shunting movement

- this means the movements of trains or vehicles other than the normal passage of trains along running lines

### 2.2 GENERAL INSTRUCTIONS

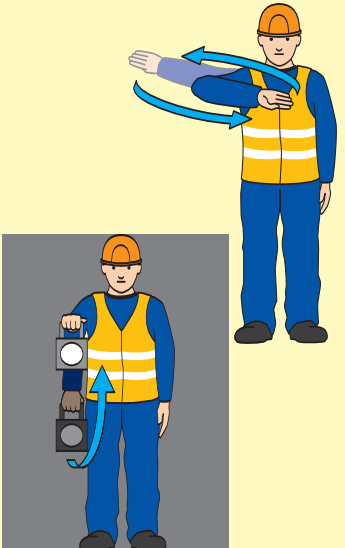

#### 2.2.1 Speed of movements

- shunting movements must be made cautiously
- speed must not exceed 8 kmh (5 mph) in depots, yards or sidings
- on running lines, speed must not exceed 16 kmh (10 mph)

#### 2.2.2 Control of movements by handsignals



- where movements are controlled by handsignals, the following handsignals must be used:

**2.0 DEFINITION AND GENERAL INSTRUCTIONS**

HANDSIGNAL	DIAGRAM	MEANING
<p>Either arm moved in a circular manner away from the body or a white (*) light waved slowly up and down</p>		<p>Driver required to <b>MOVE AWAY</b> from person giving handsignal</p>
<p>Either arm moved across and towards the body at shoulder height or a white (*) light waved slowly from side to side</p>		<p>Driver required to <b>MOVE TOWARDS</b> person giving handsignal</p>

(\*) a green light must be used if the movement must be made slowly

## 2.0 DEFINITION AND GENERAL INSTRUCTIONS

HANDSIGNAL	DIAGRAM	MEANING
<p>Either arm held horizontally and arm moved up and down</p>		<p>Driver required to <b>SLOW DOWN</b></p>
<p>Both arms raised above the head (or, when riding on a vehicle, either arm held horizontally) or a red light held steadily</p>		<p>Driver required to <b>STOP IMMEDIATELY</b></p>

- when the Driver is required to EASE COUPLINGS, this must be indicated by:
  - bringing the hands together above the head, or
  - a green light waved slowly from side to side followed by a red handsignal

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.1 CONTROL OF MOVEMENTS

#### 3.1.1 What you must ensure before shunting starts

- you must reach a clear understanding with the Shunter as to what movements are required
- you must also reach a clear understanding as to whether those movements will be controlled by handsignals or radio

#### 3.1.2 What you must understand about the control of shunting movements

- during shunting, you must work ONLY to the instructions of the Shunter
- you must not make any movement, even when a signal is cleared, unless authorised by the Shunter
- you must not start any movement unless:
  - you are certain the Shunter's handsignal, indication or instruction applies to you
  - you are completely clear as to its meaning
- you must not pass any signal at Danger or any Limit of Shunt indicator unless authorised by the Signaller
- you must STOP IMMEDIATELY if:
  - you cannot maintain sight of the Shunter or the Shunter's handsignals where movements are controlled by handsignals
  - there is any break in transmission of continuous speech/bleep where movements are controlled by radio

### 3.0 INSTRUCTIONS TO DRIVERS

- you are in any doubt whether it is safe to continue a movement, irrespective of how it is controlled
- you must not then restart the movement until authorised by the Shunter

### 3.2 COUPLING OF VEHICLES WITH AUTOMATIC COUPLERS

- care must be taken to prevent damage when coupling vehicles with automatic couplers
- movements involving coupling such vehicles must be stopped when the vehicles are about 2 metres (6ft 6 inches) apart, before bringing them together



## 4.0 INSTRUCTIONS TO SHUNTERS

### 4.1 PERSONAL SAFETY

**REMINDER:** you must observe the instructions in Section B, clause 4 concerning getting on and off moving vehicles and riding on steps

#### 4.1.1 What you must do before going in between vehicles

- wait until the vehicles are together and stationary
- if you need to attend to automatic couplers, wait until the vehicles have stopped a safe distance apart
- in either case, you must then:
  - exhibit a hand Danger signal to the Driver, or
  - tell the Driver to remain stationary
- if there is any possibility of any other vehicles being shunted against those between which you require to work, you must obtain an assurance from the Shunter(s) concerned that no movement will be made towards them

**IMPORTANT:** do not go in between vehicles until you are sure no movement will take place

## 4.0 INSTRUCTIONS TO SHUNTERS

### 4.1.2 What you must do when coupling or uncoupling vehicles

- when uncoupling, disconnect the brake pipes before any other connections
- when coupling, couple the brake pipes last
- while you are attending to the other connections, leave the air brake pipe cocks open or the vacuum pipes off the dummy plugs to prevent any movement
- do this also while attending to automatic couplers on vehicles which you have stopped a safe working distance apart

**IMPORTANT: do not remain in between vehicles during an “Easing Up” movement**

### 4.1.3 What you must do when on the ground beside moving vehicles

- take care to avoid tripping or falling
- take special care to see there is sufficient clearance for your safety at converging points

## 4.2 CONTROL OF MOVEMENTS

### 4.2.1 What you must arrange before shunting starts

- you must reach a clear understanding with the Driver as to:
  - what movements are required
  - how those movements are to be controlled

## 4.0 INSTRUCTIONS TO SHUNTERS

### 4.2.2 What you must do when controlling movements by handsignals

- use only the authorised handsignals
- give the required handsignals continuously during each movement
- make sure these handsignals cannot be taken by any other Driver nearby

**NOTE:** the Driver is required to stop the movement immediately if you or your handsignal can no longer be seen

### 4.2.3 What you must do when controlling movements by radio

- maintain constant communication with the Driver throughout the movement
- do this by speaking continuously or transmitting a continuous “bleep” signal

**NOTE:** the Driver is required to stop the movement immediately if there is any break in transmission

- a continuous “bleep” signal may be used only after you have given an instruction verbally to start or restart

## 4.3 SAFETY OF MOVEMENTS

### 4.3.1 What you must do before shunting starts

- check that all vehicles concerned can safely be moved
- warn anyone who may be endangered by shunting movements to move clear

## 4.0 INSTRUCTIONS TO SHUNTERS

- ensure that any road vehicle or other equipment is well clear

**NOTE:** you may, instead, obtain an assurance from the Person in Charge that these arrangements have been made

### 4.3.2 What you must do before each movement

- inspect all hand points facing to the movement
- ensure they are correctly set and properly fitting
- check that any derailer or scotch block is removed
- if the movement includes vehicles conveying passengers, ensure that any facing points are secured by clip if they are not electrically or mechanically locked

**REMINDER:** where practicable, you must also check that any signal applying to the movement has been cleared

### 4.3.3 What you must do during each movement

- control the speed to prevent heavy impacts with vehicles or buffer stops
- if the movement is propelled, you must:
  - whenever practicable, precede the movement on foot
  - otherwise, control the movement from a suitable place on the ground, or
  - ride in the leading suitable position from where you can control the movement and, if possible, use the automatic brake valve

## 4.0 INSTRUCTIONS TO SHUNTERS

- if the movement involves a traction unit being driven from other than the leading cab, you must ride in the leading cab and control the movement from there or control the movement from a suitable place on the ground
- if the movement includes or is towards vehicles conveying passengers, you must ensure the automatic brake is in use
- if the movement involves coupling vehicles fitted with automatic couplers, you must stop the movement when the vehicles are about 2 metres (6ft 6 inches) apart before bringing them together

**NOTE:** this is to minimise the risk of damage; this should not be considered as a “safe distance apart” as shown in clause 4.1.1

### 4.3.4 What you must do after each movement

- make sure the vehicles are stopped well clear of any points which may later need to be moved
- check that the vehicles are secured
- do not rely on the automatic brake for this purpose
- apply sufficient handbrakes
- if handbrakes are not available, use scotches and/or couple the vehicles to others with handbrakes

### 4.3.5 What you must do when shunting is completed

- ensure vehicles are within trap points, derailleurs or scotch blocks and not foul of any other line or inadvertently left on a running line

## 4.0 INSTRUCTIONS TO SHUNTERS

- ensure there is enough clearance at fouling points for a person to pass safely between the vehicles being left and any movement on the next line
- leave ground frame operated points and derailleurs in the normal position

### 4.4 PROHIBITED MOVEMENTS

#### 4.4.1 Methods of shunting which are prohibited

- loose shunting (i.e. shunting of vehicles without remaining coupled to the movement)

#### 4.4.2 Methods of shunting which are permitted only where specially authorised

- movements using a prop or pole
- movements using a rope or chain attached to a locomotive or vehicle on another line

### 4.5 MOVEMENTS OVER POINTS WORKED FROM A SIGNAL BOX OR GROUND FRAME

#### 4.5.1 What you must do before making an unsignalled movement over points worked from a signal box or ground frame

- you must obtain verbal permission for the movement from the Signalman or Ground Frame Operator
- where the points are facing the movement, you must check that they are properly fitting

## 4.0 INSTRUCTIONS TO SHUNTERS

### 4.5.2 What you must do when a movement has passed clear of points which require to be moved

- if necessary, you must advise the Signaller or Ground Frame Operator verbally

## 4.6 ADDITIONAL INSTRUCTIONS CONCERNING SHUNTING MOVEMENTS ON RUNNING LINES

### 4.6.1 What you must understand about shunting movements outside the home signal

- a shunting movement in the wrong direction must not pass beyond the home signal unless authorised by the Signaller
- additionally, where there is a falling gradient towards the signal box in rear, you must ensure that:
  - the automatic brake remains operative throughout, or
  - the locomotive is at the lower end

## 4.0 INSTRUCTIONS TO SHUNTERS

### 4.6.2 What you must do when vehicles are to be left on a running line

- you must observe the requirements of Section K
- make sure the vehicles are properly secured
- in darkness or poor visibility, place a red light on the rear end of the vehicles
- on a single or bi-directional line, do this at both ends



# **SECTION K**

## **DETENTION OF TRAINS OR VEHICLES ON RUNNING LINES**

Not Used

## 1.0 PRINCIPLES

### 1.1 NEED TO REMIND SIGNALMAN

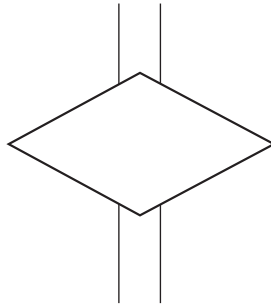
- in the interests of safety, the Signalman must be reminded of the presence on a running line of:
  - any train detained at a signal at Danger
  - any shunting movement which is detained
  - any vehicle which is to be abnormally detached and left
- where such working normally takes place, the Signalman need NOT be reminded of the presence of a loaded or empty passenger train or a light locomotive when detained on a platform line

### 1.2 MEANS OF REMINDING SIGNALMAN

- this reminder must be given by one or more of the following:
  - use of the train-radio
  - use of the signal-telephone
  - use of any other means of communication which is readily available
  - operation of a track circuit
  - the Driver or Shunter going to the signal box

## 1.0 PRINCIPLES

**NOTE:** the provision of a track circuit is indicated at a semaphore signal by a white diamond sign



Indicates provision of track circuit indication

### 1.3 WHEN REMINDER IS TO BE GIVEN

- according to the circumstances as described in this Section K, this reminder must be given either:
  - immediately on stopping, or
  - within a specified period of stopping

### 1.4 RESPONSIBILITY FOR GIVING REMINDER

- the Driver is normally responsible for giving this reminder

## 2.0 INSTRUCTIONS TO DRIVERS

### 2.1 WHAT YOU MUST DO WHEN DETAINED AT A SIGNAL WHERE TRAIN-RADIO OR A SIGNAL-TELEPHONE IS AVAILABLE

- contact the Signalman by train-radio, if possible
- otherwise, use the telephone at the signal where your train is detained
- tell the Signalman:
  - the description of your train
  - the identity (prefix letter/number/description) of the signal at which your train is detained
  - the line on which it is standing
- do this immediately on stopping at any signal at Danger where it is exceptional for your train to be detained
- do this within two minutes of stopping at any other signal at Danger
- if your train is to remain at the signal, call the Signalman again every five minutes unless told otherwise

### 2.2 WHAT YOU MUST DO WHEN DETAINED AT A SIGNAL WHERE NEITHER A SIGNAL-TELEPHONE NOR TRAIN-RADIO IS AVAILABLE

- sound the horn immediately on stopping
- contact the Signalman by any other means of communication which is readily available

## 2.0 INSTRUCTIONS TO DRIVERS

- if this is not possible and your train is detained an unusually long time, go to the signal box and observe the instructions in clause 2.6
- do this, in any case, within 10 minutes of stopping
- tell the Guard (where provided) that you are leaving the train

### **EXCEPTION: WHERE A WHITE DIAMOND IS NOT PROVIDED AT THE SIGNAL**

- **if unable to contact the Signaller, you must go to the signal box within 2 minutes of stopping, except in poor visibility, when you must go without further delay**

## 2.3 WHAT YOU MUST DO WHEN A SHUNTING MOVEMENT IS DETAINED

- contact the Signaller by train-radio, if possible
- otherwise, use the signal-telephone (where provided) or other convenient telephone or instruct the Shunter to do so
- if neither train-radio nor signal-telephone is available, contact the Signaller by any other means of communication which is readily available
- the Signaller must be told:
  - the description of the shunting movement
  - the identity of the signal at which it is detained
  - the line on which it is standing

## 2.0 INSTRUCTIONS TO DRIVERS

- if unable to contact the Signaller as shown above, you must go to the signal box or instruct the Shunter to do so
- you must do this whenever the movement is detained for longer than normally taken to set up the route for its next movement
- you need only do this, however, if the movement is detained for an unusually long time if this occurs at:
  - a signal with a white diamond sign, or
  - a position light signal, or
  - a miniature colour light signal

**IMPORTANT:** when the movement has been shunted from one running line to another, make certain that the line from which it has been shunted is clear before contacting the Signaller

## 2.4 WHAT YOU MUST DO WHEN A TRACTION UNIT OR ON-TRACK MACHINE WHICH CANNOT BE RELIED ON TO OPERATE TRACK CIRCUITS IS DETAINED

- you must remind the Signaller of its presence by the quickest possible means
- do this immediately when detained at a stop signal at Danger
- in the case of a shunting movement, do this immediately there is any delay in setting up the route for its next movement

**NOTE:** this instruction applies on all running lines and in all circumstances

## 2.0 INSTRUCTIONS TO DRIVERS

### 2.5 WHAT YOU MUST DO WHEN USING A SIGNAL-TELEPHONE ON ANOTHER LINE

- if it is necessary to use a signal-telephone OTHER THAN the one at which your train or movement is detained, you must expressly tell the Signaller that this is the case
- you must make sure you speak to the right Signaller and a clear understanding is reached concerning the position of your train or shunting movement

### 2.6 WHAT YOU MUST DO WHEN REQUIRED TO GO TO THE SIGNAL BOX

- on arrival, remind the Signaller of the presence of your train or shunting movement
- enter the details in the Train Register, as follows:  
  
"Train No .....  
  
detained on ..... line  
  
at ..... signal"
- sign the entry (which the Signaller will countersign) and add a note of the time
- obtain the Signaller's assurance that any necessary reminder appliances have been used
- then leave the signal box immediately



## 3.0 INSTRUCTIONS TO SHUNTERS

### 3.1 WHAT YOU MUST DO WHEN A SHUNTING MOVEMENT IS DETAINED

- the Driver will tell you when you are required to remind the Signalman of the presence of a shunting movement which is detained
- when required to use the signal-telephone or other telephone, you must tell the Signalman:
  - the description of the shunting movement
  - the identity of the signal at which it is detained
  - the line on which it is standing
- when required to go to the signal box, you must carry out the instructions in clause 2.6

### 3.2 WHAT YOU MUST DO WHEN VEHICLES ARE TO BE LEFT ON A RUNNING LINE

- you must first inform the Signalman before vehicles are left on a running line
- you must also remind the Signalman of the rear portion of a train when it has been detained and the front portion has continued its journey
- do this as soon as the signal has been replaced to Danger behind the front portion

**EXCEPTION:** this clause 3.2 does not apply where such working regularly takes place

Not Used

# **SECTION M**

**TRAINS STOPPED BY ACCIDENT, FAILURE,  
OBSTRUCTION OR OTHER EXCEPTIONAL  
INCIDENT**

Not Used

## 1.0 PRINCIPLES

### 1.1 IF A TRAIN ACCIDENT OCCURS

- arrangements must be made immediately to prevent other trains becoming involved
- this must be done by arranging for EMERGENCY SIGNAL PROTECTION
- if this cannot be achieved quickly or if this may not stop all approaching trains, EMERGENCY DETONATOR PROTECTION must also be provided

### 1.2 IF A FIRE OCCURS ON A TRAIN

- any fire, however small, on a moving train must be put out immediately
- unless this can be done within a few seconds, the train must be stopped immediately

### 1.3 IF A TRAIN BECOMES DIVIDED

- care must be taken when stopping the first portion to prevent a collision
- the portions must be recoupled when safe and practicable
- otherwise, arrangements must be made to safeguard the rear portion left in the section

### 1.4 IF A TRAIN FAILS

- if practicable the Driver must inform the Signalman immediately and, if necessary, ASSISTANCE PROTECTION must be arranged
- if the Signalman cannot be told immediately, no further action is needed if the train will restart within ten minutes

## 1.0 PRINCIPLES

- otherwise, the Driver must arrange ASSISTANCE PROTECTION in whichever direction assistance is likely to be obtained and communicate with the Signaller as quickly as possible

## 2.0 DEFINITIONS

### 2.1 TRAIN ACCIDENT

This includes any of the following when on or near a running line:

- a collision or derailment involving trains or rail vehicles
- a collision with an obstruction causing the obstruction of an adjacent running line
- a major fire on a train which may endanger passing trains or cause passengers to detrain onto a running line
- a train division unless it is obvious the portions are coming to rest without danger

### 2.2 EMERGENCY SIGNAL PROTECTION

- this means the placing or maintaining of signals at Danger in sufficient time to prevent trains approaching a portion of line obstructed by a train accident on an adjacent line
- this also means the placing or maintaining of signals at Danger in sufficient time to prevent trains approaching a portion of line on which the disabled train(s) was travelling if it is completely derailed

### 2.3 EMERGENCY DETONATOR PROTECTION

- this means the immediate placing of a track circuit operating device on the line concerned

## 2.0 DEFINITIONS

- this also means the placing of three detonators 20 metres (20 yards) apart on the line 2km (1¼ miles) from the obstruction

**EXCEPTION:** where this distance falls in a tunnel, the detonators must be placed at the far end of the tunnel

- this also means the placing of three additional detonators on the line before reaching 2km (1¼ miles) if:
  - a train approaches, or
  - a tunnel entrance is reached, or
  - a diverging junction intervenes (see **note 1** below), or
  - a place is reached where direct contact with the Signalman is established for the first time since the accident (see **note 2** below)

**NOTES:** (1) discretion must be used as to the order lines are protected

(2) if the Signalman confirms that Emergency Signal Protection can now be provided, three detonators must be placed on the line 400 metres (¼ mile) from the obstruction and all others may be withdrawn

- the three detonators must be 20 metres (20 yards) apart on the same rail
- a hand Danger signal must be shown while Emergency Detonator Protection is being carried out

## 2.0 DEFINITIONS

### 2.4 TRAIN FAILURE

This includes if a train is stopped by:

- a minor obstruction on the line which can be removed
- a minor fire on the train which can be put out quickly
- a minor incident which can be made safe

### 2.5 ASSISTANCE PROTECTION

- this means the placing of three detonators 20 metres (20 yards) apart on the line on which the disabled train is standing, 400m (1/4 mile) from that train

**EXCEPTION:**      **where this distance falls in a tunnel, the detonators must be placed at the far end of the tunnel**

- the person placing Assistance Protection must either:
  - remain at the detonators, or
  - continue further if necessary to telephone the Signalman
- the person placing Assistance Protection must also show a hand Danger signal and stop the assisting train on arrival at the protection



## 3.0 INSTRUCTIONS TO DRIVERS

### 3.1 IF A TRAIN ACCIDENT OCCURS

#### 3.1.1 What you must do immediately

- stay calm
- make sure you know your exact location
- assess whether any other running line may be blocked
- if in doubt, assume the line is blocked
- decide upon the quickest means to alert the Signalman
- where possible, switch the headlights/marker lights to show a Danger/emergency indication

#### 3.1.2 Where direct contact with the Signalman is immediately possible

- contact the Signalman immediately or within thirty seconds by train-radio, if possible
- otherwise, use any telephone (fixed or mobile) which is immediately available
- say “this is an Emergency Call”
- give your position
- say which line(s) is or may be blocked
- say whether there is any possibility your train is completely derailed
- stay in contact with the Signalman until you are told whether Emergency Detonator Protection is needed

## 3.0 INSTRUCTIONS TO DRIVERS

- if Emergency Detonator Protection is not needed, you must then place a T-COD on the line(s) concerned to supplement the signal protection

### 3.1.3 Where train-radio is available but direct contact with the Signaller is not possible

- where direct contact with the Signaller is not immediately possible (as shown in clause 3.1.2), use the train-radio to contact someone who will have direct contact with the Signaller
- give the information described in clause 3.1.2
- stay in contact until you are certain that your message is understood
- then carry out Emergency Detonator Protection without waiting further

### 3.1.4 Where train-radio is not available and direct contact with the Signaller is not possible

- you must immediately carry out Emergency Detonator Protection
- you must, if practicable, transmit an "OBSTRUCTION ON LINE" message before leaving the train

### 3.1.5 What you must do before leaving your driving cab

- check that the headlights/marker lights have, where possible, been switched to show a Danger/emergency indication
- switch off any train heating/air conditioning but leave train lighting controls switched on

## 3.0 INSTRUCTIONS TO DRIVERS

- shut down or secure the traction unit as necessary
- gather up the necessary equipment if Emergency Detonator Protection is required

### 3.1.6 What you must do if required to carry out Emergency Detonator Protection

- when necessary, you must arrange for Emergency Detonator Protection to be provided:
  - on each adjacent obstructed line
  - on the line(s) on which the train(s) is standing if the train(s) is completely derailed or may have ceased to actuate track circuits

**REMINDER:** a track circuit operating device must immediately be placed on each line on which Emergency Detonator Protection is required

- you must obtain assistance, if necessary, from any suitable person (including the Guard, who is required to come to the driving cab if a train accident occurs)
- on completion of Emergency Detonator Protection, you must return to your train unless you need to continue further in order to contact the Signalman

## 3.2 IF A FIRE OCCURS ON THE TRAIN

### 3.2.1 What you must do immediately

- stop the train unless you are sure the fire will be put out within a few seconds
- but try to avoid stopping the train in a tunnel or on a viaduct or other unsuitable place

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.2.2 If you are in charge of a D.O. train

- carry out the instructions to Guards shown in clause 4.2

### 3.2.3 If a major fire occurs

- if the fire might endanger passing trains or result in passengers detraining onto an adjacent running line, you must arrange for Emergency Signal Protection
- if possible, burning vehicles should be separated from others if the fire may spread, but only after any passengers safety has been secured

## 3.3 IF A TRAIN BECOMES DIVIDED

### 3.3.1 What you must do if you realise your train is divided

- alert the Signalman by the quickest means possible
- alert the Driver of any approaching train
- do not pass any signal at Danger unless authorised

### 3.3.2 What you must do when both portions are stopped

- assess whether any other running line may be obstructed
- if in doubt, assume that the line(s) is obstructed
- arrange for Emergency Signal/Detonator Protection on any obstructed line(s)
- ensure both portions of your train are secure
- make sure that passengers are not endangered
- arrange for the vehicles in each portion to be counted

## 3.0 INSTRUCTIONS TO DRIVERS

- arrange for the couplings to be checked to see whether:
  - they may have damaged the track (in which case, the Signalman must be told)
  - they can be used to recouple the portions (on vehicles where this is permitted)

**WARNING:**            **do not touch severed train heating or lighting connections until they are switched off**

### 3.3.3 What you must do if the portions can be recoupled

- you must arrange to recouple the portions if safe and practicable to do so
- you must personally obtain the Signalman's permission before making any wrong direction movement
- you must not, however, make a wrong direction movement over an automatic or manned level crossing
- you must also arrange for the Guard or a competent person to control the movement by handsignals
- tell the Signalman after the train has been recoupled, stopping specially if necessary
- arrange for examination by the Maintenance staff at the first suitable location

### 3.3.4 What you must do if the portions cannot be recoupled

- you must take the front portion forward to the next suitable location where it can be shunted clear
- do not attach tail lamps until this portion reaches the next signal box (not applicable on a Track Circuit Block line)

## 3.0 INSTRUCTIONS TO DRIVERS

- arrange for three detonators to be placed 400 metres (1/4 mile) ahead of the rear portion
- do not pass any signal equipped with a telephone or any signal box without first ensuring the Signaller understands that a portion has been left behind
- do not give up the Token if a portion has been left behind in the token section

**EXCEPTION:**      **if the front portion is to continue beyond the Token station ahead, you must give up the Token and not re-enter the occupied section without again receiving the Token; the Signaller is not allowed to restore the Token to the instrument until the section is clear**

### 3.3.5 What you must do with any damaged couplings

- if practicable, take charge of any damaged parts
- hand these in when you book off, with a report of the circumstances

## 3.4 IF A TRAIN FAILURE OCCURS

### 3.4.1 Where train-radio or a telephone (fixed or mobile) is available

- use this immediately to advise the Signaller of the failure and say whether assistance is required
- arrange Assistance Protection (if required) in the direction from which the Signaller says assistance will come

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.4.2 Where neither train-radio nor any telephone is available

- the Signaller need not be advised and protection is not necessary if the train will be able to restart within ten minutes
- otherwise, you must arrange Assistance Protection in whichever direction assistance is most likely to be provided and contact the Signaller from the first suitable place in that direction
- if assistance can only come from the other direction, the Assistance Protection must be withdrawn and provided in that other direction

### 3.4.3 After the Signaller is advised that assistance is required

- you must ensure that the disabled train is not moved until assistance has arrived or other arrangements have been agreed with everyone concerned
- you must remain at the Assistance Protection point (or beyond, if you have continued further to contact the Signaller) until the assisting train arrives
- you must join the Driver of the assisting train and indicate the position of your train
- unless your train is clearly visible from the detonators protecting it, you must proceed on foot from there, guiding the Driver of the assisting train by handsignals

### 3.4.4 Before the assisting train enters the section

**NOTE:** these instructions concern the Driver of the assisting train

## 3.0 INSTRUCTIONS TO DRIVERS

- you must personally reach a clear understanding with the Signaller as to:
  - what is required
  - the approximate location of the disabled train
  - the end of the section to which the disabled train is to be moved
- where necessary, you will be instructed to pass the protecting signal at Danger

### 3.4.5 During the movement of the assisting train

**NOTE:** these instructions concern the Driver of the assisting train

- you must observe the appropriate provisions of Section D
- watch out for the Driver of the disabled train
- do not enter a tunnel unless:
  - the Driver from the disabled train is already accompanying you, or
  - you have checked that this Driver is not on foot in the tunnel
- stop at the protecting detonators
- proceed at extreme caution from there to the disabled train; the Driver from that train is required to conduct your movement on foot unless the disabled train is clearly visible from the detonators
- make sure your train is correctly coupled to the disabled train and that the automatic brake pipes, where compatible, are connected



## 3.0 INSTRUCTIONS TO DRIVERS

### 3.4.6 Additional instructions on single lines and lines where Single Line Working applies

- you must tell the Pilotman (if present) of the arrangements for assistance
- you must retain the Token (where issued) and hand this to the Driver of the assisting train on arrival

## 3.5 IF A WRONG DIRECTION MOVEMENT OF AN ASSISTING TRAIN IS REQUIRED ON THE ADJACENT LINE

**NOTE:** these instructions concern the Driver of the assisting train

### 3.5.1 Authority for the movement

- an assisting train may be authorised to proceed in the wrong direction over the adjacent line past the disabled train in order to assist from the front
- this arrangement is not permitted where there is a tunnel in the section
- the assisting train must comprise either:
  - a light locomotive(s), or
  - an empty multiple unit train
- the provisions of Section N, Part 1 (Single Line Working) do not then apply

### 3.5.2 Before the assisting train enters the section on the adjacent line

- you must personally obtain the Signaller's permission for the movement to take place

## 3.0 INSTRUCTIONS TO DRIVERS

- you must reach a clear understanding with the Signaller as to what is required and how far the movement is to proceed

### 3.5.3 During the movement of the assisting train over the adjacent line

- you must observe the appropriate provisions of Section D

## 4.0 INSTRUCTIONS TO GUARDS

### 4.1 IF A TRAIN ACCIDENT OCCURS

#### 4.1.1 What you must do immediately

- stay calm
- proceed to the driving cab
- take your detonators and flags/handlamp, if readily available
- where possible, place a track circuit operating device or clip on each adjacent line which may be obstructed
- give the Driver any necessary assistance in arranging Emergency Signal/Detonator Protection

#### 4.1.2 What you must then do if the Driver is disabled

- arrange for Emergency Protection to be provided:
  - on each adjacent obstructed line
  - on the line(s) on which the train(s) is standing if the train(s) is completely derailed or may have ceased to actuate track circuits
- make sure that a track circuit operating device or clip has first been placed on each of those lines

## 4.0 INSTRUCTIONS TO GUARDS

- obtain assistance, if necessary, from any suitable person
- on completion of Emergency Protection, you must return to your train unless you need to continue further in order to contact the Signaller

### 4.2 IF A FIRE OCCURS ON A TRAIN

#### 4.2.1 What you must do immediately

- if possible tell the Driver immediately
- stop the train unless you are sure that you can put out the fire within a few seconds
- try to avoid stopping the train in a tunnel or on a viaduct or other unsuitable place
- move any passengers to unaffected vehicles

#### 4.2.2 If a major fire occurs

- if the fire might endanger passing trains or result in passengers detraining onto an adjacent running line, you must advise the Driver to arrange for Emergency Signal/Detonator Protection
- if possible, burning vehicles should be separated from others if the fire may spread, but only after any passengers safety has been secured

#### 4.2.3 If detraining is necessary

- tell the passengers to get out on whichever side is safer
- warn passengers of the possibility of approaching trains

## 4.0 INSTRUCTIONS TO GUARDS

- tell them to stay in a safe place clear of all lines
- use the public address system and get help from any staff or responsible person to ensure everyone's safety

### 4.2.4 If the train is to proceed when the fire is out

- if a vehicle has been affected or damaged by the fire, it must be removed from the train at the first suitable place
- passengers must not be allowed to remain in it
- if practicable, arrange for a member of staff to ride in the vehicle and be prepared to deal with any further outbreak of fire
- arrange for the vehicle to be examined frequently during the movement

## 4.3 IF A TRAIN BECOMES DIVIDED

### 4.3.1 What you must do if you realise your train is divided

- if practicable, tell the Driver immediately
- say whether any adjacent running line may be or become obstructed
- if you are travelling with the rear portion, stop it immediately and secure it

### 4.3.2 What you must do when both portions are stopped

- make sure any passengers are not endangered
- give the Driver any necessary assistance

# **SECTION N**

## **SINGLE LINE WORKING AND WORKING OF SINGLE LINES BY PILOTMAN**

### **PART ONE: SINGLE LINE WORKING**

### **PART TWO: WORKING OF SINGLE LINES BY PILOTMAN**

Not Used

# PART ONE

## SINGLE LINE WORKING

## 1.0 PRINCIPLES

### 1.1 NEED FOR A PILOTMAN

- Single Line Working by Pilotman (SLW) must be introduced whenever the traffic of a double line is to be worked over one line which is not signalled for bi-directional working

### 1.2 FUNCTION OF THE PILOTMAN

- the Pilotman must be present whenever a train enters or fouls the single line
- the Pilotman must personally authorise each such movement, but must first obtain the Signalman's permission for the movement concerned

**EXCEPTION:**      **there are some exceptions to this principle, but in every case, the movement must be authorised by the Signalman**

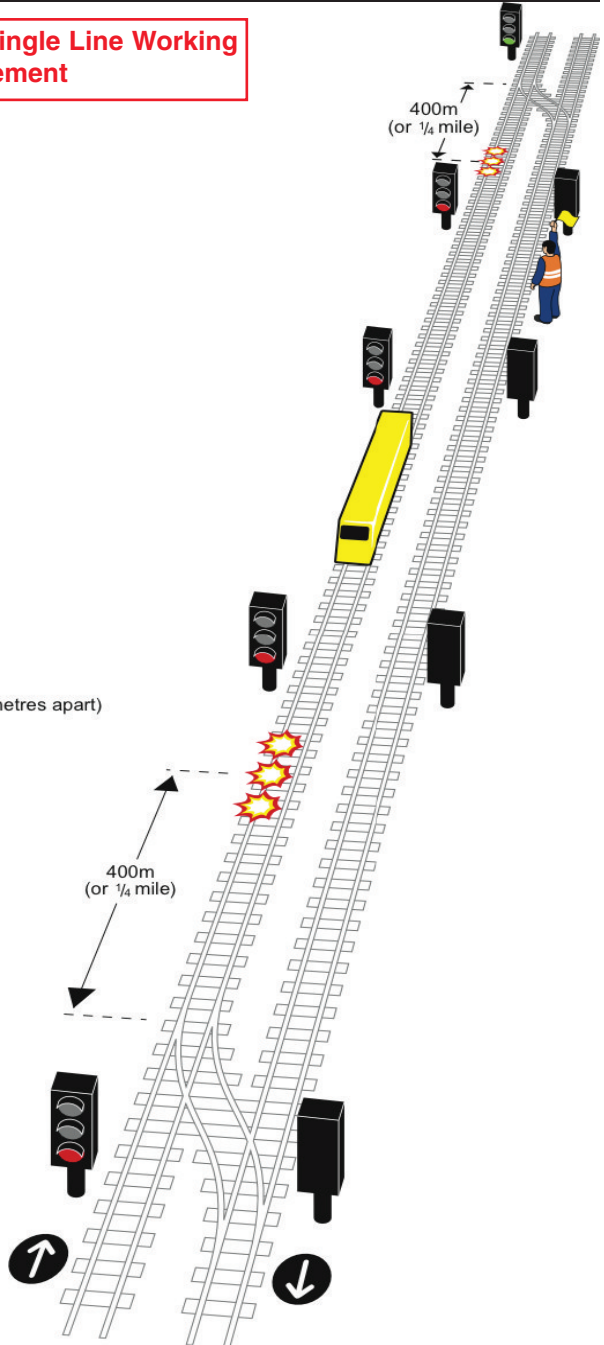


# 1.0 PRINCIPLES

Example of typical Single Line Working arrangement

**Key**  
 Three detonators (20 metres apart)

This diagram must be read in conjunction with the text



## 2.0 GENERAL INSTRUCTIONS

### 2.1 APPOINTMENT OF THE PILOTMAN

- unless pre-arranged, the Station Supervisor or Person in Charge must appoint a Pilotman
- this person must be currently certificated as competent as a Pilotman and must be familiar with the line concerned
- the Pilotman is identified by wearing on the left arm a red armband with the word "PILOTMAN" or, if this is not available, a red flag in the same position

### 2.2 SINGLE LINE WORKING FORMS TO BE COMPLETED

- the Pilotman must complete a Pilotman's SLW form
- each Signalman must complete a Signalman's SLW form at the Pilotman's dictation
- see sample forms on pages N26 - N28

### 2.3 OBSTRUCTED LINE TO BE PROTECTED

- Detonator Protection must be provided at each end of the obstructed line
- this should normally be at least 400 metres (1/4 mile) from the crossover through which SLW applies
- sufficient headroom must be left for trains to draw ahead or set back (as appropriate) towards the obstruction

## 2.0 GENERAL INSTRUCTIONS

- Detonator Protection must comprise:
  - three detonators 20 metres (20 yards) apart
  - a red banner flag by day
  - a red light (visible in both directions) during darkness or poor visibility

## 2.4 POINTS WHICH BECOME FACING TO BE SECURED

- the points listed in Table N1 below must be secured by the person shown to ensure the safety of facing movements:

**TABLE N1**

POINTS TO BE SECURED	PERSON TO ARRANGE
Worked points without facing point lock (FPL) at or released from the signal box	Signalman (see <b>note A</b> )
Worked points (with or without FPL) at or released from a signal box which is closed	Pilotman
Unworked points	Pilotman
<p><b>NOTE A - where the points are remote from the signal box and will not need to be operated during SLW, the Signalman may request the Pilotman to arrange to secure them</b></p>	

## 2.0 GENERAL INSTRUCTIONS

### 2.5 CONTROL OF MOVEMENTS IN THE RIGHT DIRECTION OVER THE SINGLE LINE

- signals relating to the unobstructed line must be worked whenever practicable
- movements over automatic crossings being locally operated must be controlled by handsignals

### 2.6 CONTROL OF MOVEMENTS IN THE WRONG DIRECTION OVER THE SINGLE LINE

- signals relating to the obstructed line must be disregarded
- movements must be controlled by handsignals at the locations listed in Table N2 below:

**TABLE N2**

LOCATION	PROCEED INDICATION
Opposite the signal protecting the crossover where trains return to the proper line (Track Circuit Block lines only)	Yellow handsignal
Opposite the home signal worked from the signal box controlling the crossover where trains return to the proper line (Absolute Block lines only)	Yellow handsignal
Opposite any other signal where trains may be required to stop	Yellow handsignal
At any automatic level crossing being locally operated	Green handsignal
At any manned level crossing protected by signals (except where/when the crossing is normally closed to road traffic)	Green handsignal
At any intermediate signal box (unless closed)	Yellow handsignal

## 2.0 GENERAL INSTRUCTIONS

### 2.7 AUTHORITY FOR MOVEMENTS TO ENTER OR FOUL THE SINGLE LINE

- the Pilotman must be present and personally authorise the Driver of any movement which is to enter or foul the single line
- the Pilotman must first obtain the permission of the Signalman controlling the entrance to the section before authorising any such movement
- the Signalman is, however, permitted to authorise such movements without the Pilotman being present in the circumstances listed in Table N3 below:

**TABLE N3**

<b>CIRCUMSTANCES</b>	<b>CONDITIONS</b>
Train to enter single line to assist a disabled train	Pilotman's permission to be obtained by Signalman
Train to pass through a trailing crossover in rear of the obstruction	No special conditions
Train to pass to/from an unaffected route at a junction at the end of the single line section	Signals to be worked normally. Driver need not be told that SLW applies

- a train not accompanied by the Pilotman may work at an intermediate signal box, but the Signalman there must first obtain permission from the Pilotman

## 2.0 GENERAL INSTRUCTIONS

### 2.8 WHEN SINGLE LINE WORKING MAY BE WITHDRAWN

- only when authorised by the Pilotman after being informed by the Signaller that SLW is no longer required

### 2.9 WORKING OF TRAINS TO AND FROM A POINT OF OBSTRUCTION

#### 2.9.1 Basic principle

- when both lines of a double line railway are blocked and it is necessary for trains to work to and from the point of obstruction, all trains must pass over one line on which SLW must be introduced as shown below
- if necessary, this working may apply on both sides of the obstruction

#### 2.9.2 Modifications required to normal SLW arrangements

- when trains approaching the obstruction are required to stop, either:
  - Detonator Protection must be provided, or
  - a signal must be kept at Danger
- Detonator Protection provided in accordance with Section T, Part 3 must be repositioned, if necessary, to allow trains to run to the required place
- SLW forms must be amended as appropriate
- all trains must be accompanied by the Pilotman

## 3.0 INSTRUCTIONS TO THE PILOTMAN

### 3.1 BEFORE SINGLE LINE WORKING STARTS

#### 3.1.1 What you must check with each Signalman

- the details of the SLW arrangements
- whether any of the following will be affected by SLW:
  - manned level crossings protected by signals (except where/when the crossing is normally closed to road traffic)
  - automatic level crossings
  - unworked points
  - intermediate signal boxes which are closed
- whether the obstructed line is under possession
- the time(s) the Signalmen change duty
- the time(s) intermediate signal box(es) open

#### 3.1.2 Arrangements you must make concerning SLW forms

- at the time you have agreed with the Signalman for SLW to start, you must check that the line concerned is clear
- you must then enter the details of the arrangements on a Pilotman's SLW form
- when you have done that, you must dictate a SLW form to:
  - the Signalman controlling each crossover between which SLW will apply
  - the Signalman at any intermediate signal box (unless closed)

## 3.0 INSTRUCTIONS TO THE PILOTMAN

- record the name of each Signaller on your SLW form (Part A)

### 3.1.3 Arrangements you must make after SLW forms are dictated

- arrange for the protection of the obstructed line
- if necessary, supplement the protection already there if the line is under possession
- arrange for a handsignal to be exhibited to trains travelling over the single line in the wrong direction opposite the signals listed in Table N2 (see page N8)
- if necessary, appoint a Handsignalman to observe the provisions of Section B, clause 9 at those locations
- ensure that any unworked points are secured and padlocked for the safety of movements on the single line
- make sure that a green flag or light is placed alongside those points when secured and is clearly visible to Drivers of trains approaching in the wrong direction
- ensure that any worked points (with or without an FPL) which are facing for wrong direction movements at an intermediate signal box which is closed are secured and padlocked for the safety of movements over the single line
- keep the key to the padlock of any points you have secured
- take possession of the key to the padlock of any points secured by someone else and check that such points are properly secured before the first train passes over them in the facing direction (see Note A, clause 3.1.4)
- check whether track circuit controls need to be disconnected and, if so, tell the Signaller to arrange accordingly with the Signal Technician



## 3.0 INSTRUCTIONS TO THE PILOTMAN

- tell the Person in Charge of any station where the working will be affected by SLW
- tell everyone working on or near the line that SLW is to be introduced and say which line is to be used (see Note B, clause 3.1.4)
- tell any Crossing Keeper concerned that SLW is being introduced and say what arrangements apply for the working of block indicators (see Note A, clause 3.1.4)
- ascertain the details of any temporary or emergency speed restrictions on the single line

### 3.1.4 What you must ensure before SLW starts

- you must ensure that all the arrangements shown in clause 3.1.3 are completed before SLW starts with the following exceptions:
  - [Note A](#)

you may observe these instructions while accompanying the first train, which you must then do specially for this purpose
  - [Note B](#)

you may observe this instruction while accompanying the first train, or tell the Driver to do so if you do not accompany that train
- check with each Signaller concerned that they have completed the arrangements required for SLW to take place
- when all arrangements required for SLW are completed, tell each Signaller accordingly

## 3.0 INSTRUCTIONS TO THE PILOTMAN

- say where precisely Handsignalman and Emergency Operators are located
- enter on your SLW form (Part A) the time when all Signalmen have been advised
- SLW may then start

## 3.2 DURING SINGLE LINE WORKING

### 3.2.1 What you must understand about authorising movements

- you must be present and personally authorise the Driver of any movement, other than as shown in Table N3 (see page N9), which is to enter or foul the single line
- you must first obtain the permission of the Signalman controlling the entrance to the section before authorising any such movement
- you must also have the Signalman's express permission before authorising any movement to pass a signal at Danger

### 3.2.2 What you must do when authorising movements

- tell the Driver between which crossovers and over which line SLW applies
- make sure the Driver clearly understands which crossover is being used where there is more than one at either end of the section
- tell the Driver not to pass over any automatic level crossing which is being locally operated unless authorised by the Emergency Operator at the crossing
- if the train is worked by two or more locomotives, you must give the necessary instructions to each Driver

## 3.0 INSTRUCTIONS TO THE PILOTMAN

- tell the Driver of the first train to stop where necessary in the section to enable you (or the Driver, if you are not accompanying that train) to tell everyone on or near the line that SLW applies

### 3.2.3 What you must do additionally when authorising movements in the wrong direction

- tell the Driver exactly where handsignals controlling the movement will be exhibited
- instruct the Driver not to pass any such location unless authorised by a handsignal exhibited there
- instruct the Driver not to pass over any manned level crossing protected by signals unless authorised by a handsignal exhibited there
- if, however, the normal position of the gates is across the public road, tell the Driver not to pass over the crossing without first ensuring it is safe to do so
- remind the Driver of the presence of the following:
  - unworked points
  - temporary or emergency speed restrictions
  - intermediate signal boxes which are closed

### 3.2.4 When you must ride with the Driver

- do this unless there is another train to follow
- if the train is worked by two or more locomotives, travel with the Driver of the rearmost

## 3.0 INSTRUCTIONS TO THE PILOTMAN

### 3.2.5 What you must do about points which have been secured

- from time to time, check that they remain secure
- see that the green flag or light remains effective at unworked points

### 3.2.6 What you must do on arrival at the end of the section

- tell the Signaller of your arrival immediately
- do this each time on arrival at either end

### 3.2.7 What you must do if a train fails on the single line

- if accompanying a train which fails, you must:
  - confer with the Driver before the Driver arranges for assistance
  - ask the Driver to inform the Signaller of the circumstances and to relay your permission for an assisting train to enter the section
  - remain with the failed train until assistance arrives
  - then accompany the Driver of the assisting train
- if a train fails while not accompanied by you, the Signaller will obtain your permission before allowing the assisting train to enter the section
- you must accompany the assisting train if it comes from and will return to the rear

### 3.2.8 What you must do when relieved

- make sure your relief fully understands the arrangements

## 3.0 INSTRUCTIONS TO THE PILOTMAN

- give your Pilotman's form, armband and padlock keys to your relief
- tell each Signaller and give the name of your relief
- afterwards, do not ride in the driving cab of any train over the single line

### 3.2.9 What you must do when relieving a Pilotman

- make sure you fully understand the arrangements
- take possession of the Pilotman's form, armband and padlock keys
- sign the Pilotman's form (Part C)

### 3.2.10 What you must do when a Signaller is relieved

- the new Signaller will tell you when taking duty
- note the new Signaller's name and the time on your Pilotman's form (Part B)

### 3.2.11 What you must do if an intermediate signal box is to open

- you must first dictate a SLW form to the Signaller there

## 3.3 WHEN SINGLE LINE WORKING IS TO BE WITHDRAWN

### 3.3.1 When Single Line Working is no longer required

- the Signaller will tell you when SLW is no longer required
- you must then arrange for SLW to be withdrawn as shown below

## 3.0 INSTRUCTIONS TO THE PILOTMAN

### 3.3.2 What you must do before SLW is withdrawn

- check that the last train is clear
- tell each Signaller that SLW is to be withdrawn
- then arrange for:
  - Handsignalmen to be withdrawn
  - secured points to be released
  - green handsignals to be removed
  - Detonator Protection to be withdrawn
- tell the Person in Charge at any station affected that SLW is being withdrawn
- similarly, inform each Crossing Keeper (or arrange for the Driver of the next train to do so)
- arrange for the Driver of the next train to inform anyone working on or near the line
- in all circumstances, make sure everyone concerned is also told whether the obstructed line will be opened or remain blocked
- make sure that the necessary protection is left in place if the obstructed line is to remain under possession and tell the PICOP what is happening

### 3.3.3 When normal working may be resumed

- make sure the arrangements in clause 3.3.2 are completed
- then tell each Signaller to cancel their Signaller's SLW form

## 3.0 INSTRUCTIONS TO THE PILOTMAN

- obtain an assurance that this has been done
- then cancel your own SLW form (Part D)
- normal working may then resume
- send your cancelled form to the Local Manager

## 4.0 INSTRUCTIONS TO SIGNALMEN

**NOTE:** these instructions apply to the Signalmen controlling the crossovers between which SLW is to apply and to the Signalman at any intermediate signal box

### 4.1 BEFORE SINGLE LINE WORKING STARTS

#### 4.1.1 What you must agree with the Pilotman

- the details of the arrangements to apply

#### 4.1.2 What you must point out to the Pilotman

- whether any of the following will be affected by SLW:
  - manned level crossings protected by signals
  - automatic level crossings
  - unworked points
  - intermediate signal boxes which are closed
- whether the obstructed line is under possession
- whether you expect to be relieved or an intermediate signal box to open during SLW (in which case, you must give the times concerned)

## 4.0 INSTRUCTIONS TO SIGNALMEN

### 4.1.3 Arrangements you must make concerning SLW forms

- the Pilotman will dictate a SLW form to you at the time agreed for the arrangements for SLW to begin
- enter the details, as dictated, on a Signalman's SLW form (Part A) and record the Pilotman's name
- read back the completed entry to the Pilotman
- enter the details in the Train Register

### 4.1.4 Other arrangements which you must make

- make sure that an Emergency Operator is provided at each level crossing in accordance with the instructions for the type of crossing concerned
- tell the person responsible for clearing the obstructed line not to permit any movement to pass the Detonator Protection without your permission
- check with the Pilotman how far that protection is from the crossover being used for SLW
- if that distance is less than 400 metres ( $\frac{1}{4}$  mile), tell the person concerned not to allow any movement TOWARDS the Detonator Protection without your permission

### 4.1.5 What you must do when you have completed your arrangements for SLW

- tell the Pilotman
- the Pilotman will let you know when all the arrangements for SLW are completed
- this advice will include the exact location of each Handsignalman or Emergency Operator



## 4.0 INSTRUCTIONS TO SIGNALMEN

- you must then add to the Train Register entry you have already made:

“Single Line Working started at ..... (time)”

- SLW may then start

## 4.2 DURING SINGLE LINE WORKING

### 4.2.1 When you may authorise movements to enter the single line

- you may authorise movements to enter or foul the single line only as permitted in the Train Signalling Regulations
- you must not give such authority unless the Pilotman is present where the movement is to enter or foul the single line, except as shown in Table N3 (see page N9)

### 4.2.2 Arrangements you must make to secure points

- make sure that any worked points without an FPL are secured before you authorise any facing movement over them
- this applies whether the points are at or released from your signal box

### 4.2.3 When you may authorise movements on the obstructed line

**NOTE:** this clause applies only where the Detonator Protection is less than 400 metres (1/4 mile) from a crossover being used for SLW

- you must not permit any movement on the obstructed line towards the Detonator Protection until any conflicting movement has passed clear of the crossover

## 4.0 INSTRUCTIONS TO SIGNALMEN

- after giving such permission, you must not permit a conflicting movement over the crossover until the movement on the obstructed line has passed clear or is completed

### 4.2.4 What you must do if a train fails on the single line

- you must obtain the Pilotman's permission before authorising the assisting train to enter the section
- if the Pilotman is accompanying the failed train, this permission may be relayed by the Driver of the failed train when arranging for assistance

### 4.2.5 What you must do when relieved or relieving

- when relieved, make sure your relief fully understands the arrangements for SLW
- when relieving, sign the SLW form (Part B) in the presence of the Signalman being relieved and tell the Pilotman you have taken charge

### 4.2.6 What you must do when the Pilotman is relieved

- enter the name of the new Pilotman and the time on your SLW form (Part C)

### 4.2.7 What you must do if opening an intermediate signal box where SLW applies

- do not open the signal box until you have completed a Signalman's SLW form (Part A) at the Pilotman's dictation

## 4.0 INSTRUCTIONS TO SIGNALMEN

### 4.3 WHEN SINGLE LINE WORKING IS TO BE WITHDRAWN

#### 4.3.1 When Single Line Working is no longer required

- before normal working resumes, you must:
  - confer with the other Signalman
  - tell the Pilotman that arrangements to withdraw SLW may start

#### 4.3.2 What the Pilotman is required to do

- when the last train is clear, the Pilotman will then arrange for SLW to be withdrawn

#### 4.3.3 What you are required to do

- on completion of the arrangements to withdraw SLW, the Pilotman will instruct you to cancel your SLW form (Part D)
- when you have done this, you must make and sign an entry in the Train Register, as follows:

“Single Line Working on the ..... line  
between ..... and .....  
cancelled at .....(time)”

- normal working may then resume
- send your cancelled form to the Local Manager

## 5.0 INSTRUCTIONS TO DRIVERS

### 5.1 BEFORE ENTERING OR FOULING THE SINGLE LINE

- you must have the personal authority of the Pilotman
- this applies in all circumstances except as shown in Table N3 (see page N9)

### 5.2 WHAT YOU MUST DO WHEN AUTHORISED TO ENTER OR FOUL THE SINGLE LINE

- make sure you clearly understand:
  - which line is being used for SLW
  - precisely which crossover is being used at each end
  - any location(s) where your train will be controlled by handsignals
  - any other instructions
- if your train will pass over the single line in the wrong direction, the Pilotman will remind you of:
  - any unworked points
  - any temporary or emergency speed restrictions
- the Pilotman will travel with you unless following on a subsequent train or riding on the rearmost locomotive

### 5.3 WHAT YOU MUST UNDERSTAND ABOUT THE OBSERVANCE OF SIGNALS AND HANDSIGNALS

- when passing over the single line in the right direction, you must obey all the signals applicable to that line

## 5.0 INSTRUCTIONS TO DRIVERS

- do not pass any signal at Danger unless authorised by the Signalman, Pilotman, Crossing Keeper or Handsignalman
- when passing over the single line in the wrong direction, you must disregard signals applicable to the blocked line
- movements in the wrong direction will be controlled by handsignals exhibited at the locations listed in Table N2 (see page N8)
- you must stop at each such location unless the appropriate handsignal is exhibited authorising you to proceed
- when passing a signal at Danger or making a movement in the wrong direction, you must observe the appropriate provisions of Section D

### 5.4 WHAT YOU MUST DO IF IN CHARGE OF THE FIRST TRAIN OVER THE SINGLE LINE

- proceed cautiously
- stop where necessary for the Pilotman to inform anyone on or near the line or any Crossing Keeper that SLW applies
- if asked to do so by the Pilotman, you must inform anyone on or near the line that SLW applies

### 5.5 WHAT YOU MUST DO IF YOUR TRAIN FAILS

- you must arrange for assistance in accordance with Section M
- if accompanied by the Pilotman, you must first confer with that person and relay to the Signalman the Pilotman's permission for an assisting train to enter the section
- the Pilotman will remain with your train until assistance arrives

**SINGLE LINE WORKING - PILOTMAN'S FORM**

**PART A**

**ARRANGEMENTS**

**Location** \_\_\_\_\_ **Date** \_\_\_\_\_

I have been appointed by \_\_\_\_\_ to act as Pilotman

ALL trains between the facing / trailing\*

crossover No. \_\_\_\_\_ at \_\_\_\_\_ and the facing / trailing\*

crossover No. \_\_\_\_\_ at \_\_\_\_\_ must pass on the \_\_\_\_\_ line  
 \* Delete as appropriate

This information has been dictated to the following Signalmen:

Signal Box	Name of Signalman	Time Dictated

**All Signalmen advised that Single Line Working started**

at \_\_\_\_\_ Time / Date

Signed \_\_\_\_\_ Pilotman

**PART B**

**CHANGE OF SIGNALMAN**

Signal box at:						
Changeover	Name	Time/Date	Name	Time/Date	Name	Time/Date
<b>1st</b>						
<b>2nd</b>						
<b>3rd</b>						
<b>4th</b>						

**REMINDER - OTHER INFORMATION**

The following are affected by Single Line Working:

Automatic level crossings at \_\_\_\_\_

Manned level crossings at \_\_\_\_\_

Barrow crossings with white lights at \_\_\_\_\_

Unworked points at \_\_\_\_\_

Intermediate signal boxes \_\_\_\_\_

Closed at \_\_\_\_\_

Open at \_\_\_\_\_

Temporary speed restrictions

of \_\_\_\_ mph between \_\_\_\_\_ & \_\_\_\_\_

of \_\_\_\_ mph between \_\_\_\_\_ & \_\_\_\_\_

of \_\_\_\_ mph between \_\_\_\_\_ & \_\_\_\_\_

**PART C**

**CHANGE OF PILOTMAN**

**This form noted by**

\_\_\_\_\_ at \_\_\_\_\_ time/date

\_\_\_\_\_ at \_\_\_\_\_ time/date

\_\_\_\_\_ at \_\_\_\_\_ time/date

**PART D**

**CANCELLATION OF SINGLE LINE WORKING**

Signal Box	Name of Signalman	Time form Cancelled

**This form cancelled at** \_\_\_\_\_ time/date

Signed \_\_\_\_\_ (Pilotman)

**SINGLE LINE WORKING - SIGNALMAN'S FORM**

**PART A**

**ARRANGEMENTS**

**Signal box** \_\_\_\_\_ **Date** \_\_\_\_\_

I have been instructed that ALL trains between the facing / trailing\* crossover No. \_\_\_\_\_ at \_\_\_\_\_ and the facing / trailing\* crossover No. \_\_\_\_\_ at \_\_\_\_\_ must pass on the \_\_\_\_\_ line

\* Delete as appropriate

Form completed at the dictation of \_\_\_\_\_ (who is acting as Pilotman)  
Present / speaking from\* \_\_\_\_\_

Time \_\_\_\_\_

Signed \_\_\_\_\_ (Signalman)

**PART B**

**CHANGE OF SIGNALMAN**

Form Noted by	Time	Date

**PART C**

**CHANGE OF PILOTMAN**

Name of new Pilotman	Noted by Signalman (name)	Time	Date

**PART D**

**CANCELLATION OF SINGLE LINE WORKING**

This form cancelled at the dictation of \_\_\_\_\_ who is present / speaking from\* \_\_\_\_\_ at \_\_\_\_\_ Time / Date  
Signed \_\_\_\_\_ (Signalman)



# **PART TWO**

## **WORKING OF SINGLE LINES BY PILOTMAN**

**Section N Part Two****Weekly Circular Amendment Record**

Any amendment to this Section N Part Two issued via a Weekly Circular Notice will be recorded in the table below and displayed until the respective Rule Book pages are issued.

<b>WC No.</b>	<b>WE date</b>	<b>Description of Amendment</b>
3675	16.08.15	Alteration to instructions for the operation of Pilot Working Key Switch. Notice to be retained at page N33 until further notice.

## 6.0 PRINCIPLES

### 6.1 NEED FOR A PILOTMAN

- Working of Single Lines by Pilotman (WSP) must be introduced if the signal controlling the entrance to the single line cannot be cleared because of:
  - (a) the failure or disconnection of the signal
  - (b) the failure of a track circuit
  - (c) the failure of signalling equipment
  - (d) the failure of level crossing equipment
  - (e) the failure of Token instruments
  - (f) the loss of, or damage to, a Token
- WSP must also be introduced if it is necessary to work to and from the point of obstruction
- WSP need not, however, be introduced if:
  - clause (a) or (d) above applies and the Driver is in possession of the Token (where provided), or
  - on a Track Circuit Block line where authorised in the Train Signalling Regulations, all track circuits in respect of that signal are clear and the Driver is so advised

**NOTE:** these instructions also apply when it is necessary to introduce Working by Pilotman on a bi-directional line, as shown in the Train Signalling Regulations

### 6.2 FUNCTION OF THE PILOTMAN

- the Pilotman must be present whenever a train enters or fouls the single line
- the Pilotman must personally authorise each such movement, but must first obtain the Signalman's permission for the movement concerned

## 6.0 PRINCIPLES

**EXCEPTION:** there is an exception to this principle when it is necessary for a train to enter the single line to assist a failed train

## 7.0 GENERAL INSTRUCTIONS

### 7.1 APPOINTMENT OF THE PILOTMAN

- unless pre-arranged, the Station Supervisor or Person in Charge must appoint a Pilotman
- this person must be currently certificated as competent as a Pilotman and must be familiar with the line concerned
- the Pilotman is identified by wearing on the left arm a red armet with the word "PILOTMAN" or, if this is not available, a red flag in the same position

### 7.2 FORMS TO BE COMPLETED

- the Pilotman must complete a Pilotman's WSLP form
- each Signaller must complete a Signaller's WSLP form at the Pilotman's dictation
- see sample forms on pages N45-N48

### 7.3 TOKEN TO BE PUT OUT OF USE

- the Token (where provided) must be put out of use during WSLP

### 7.4 WHEN WORKING BY PILOTMAN MAY BE WITHDRAWN

- only when authorised by the Pilotman after being informed by the Signaller that WSLP is no longer required

## 7.0 GENERAL INSTRUCTIONS

### 7.5 WITHDRAWAL OF WORKING BY PILOTMAN BEFORE THE FAILURE IS RECTIFIED

- WSLP must normally continue until it becomes possible to resume normal working
- if, however, the line is to close (for example, after the last train of the day) before the failure can be rectified, WSLP must be withdrawn after the passage of the last train before closing
- WSLP must then be reintroduced before the passage of the first train after reopening unless:
  - the failure has been rectified in the interim, or
  - the failure can be rectified immediately the line reopens
- if WSLP is introduced on a bi-directional line, it may be withdrawn after the passage of the last train required to pass in the opposite direction, as shown in the Train Signalling Regulations

### 7.6 WORKING OF TRAINS TO AND FROM A POINT OF OBSTRUCTION

#### 7.6.1 Basic principle

- if the single line is blocked and it is necessary for trains to work to and from the point of obstruction, WSLP must be introduced between the obstruction and the nearest signal box, junction or other appropriate location

#### 7.6.2 Modifications required to normal WSLP arrangements

- where trains approaching the obstruction are required to stop, either:
  - Detonator Protection must be provided, or

## 7.0 GENERAL INSTRUCTIONS

- a signal must be kept at Danger
- Detonator Protection provided in accordance with Section T, Part 3 must be repositioned, if necessary, to allow trains to run to the required place
- WSLP forms must be amended as appropriate
- all trains must be accompanied by the Pilotman
- the Pilotman must tell the Signaller at the other side of the point of obstruction when working under these arrangements starts and when it is withdrawn

### 7.6.3 Arrangements where such working is required on both sides of the obstruction

- where necessary, these arrangements must be made on both sides of the obstruction
- normal working must not be resumed until WSLP has been withdrawn on both sides of the obstruction
- if such working is withdrawn on one side of the obstruction while continuing on the other, the Token must if necessary be transferred to the other Pilotman

## 8.0 INSTRUCTIONS TO THE PILOTMAN

### 8.1 BEFORE WORKING BY PILOTMAN STARTS

#### 8.1.1 What you must check with each Signaller

- the details of the WSLP arrangements
- whether each train is to be accompanied by you in accordance with the Train Signalling Regulations
- the time(s) when Signallers change duty

**RULE BOOK SECTION N (PART TWO), WORKING OF SINGLE LINES BY PILOTMAN**

**OPERATION OF PILOT WORKING KEY SWITCH**

All concerned, please note the WC notice of the same title displayed on page 5 in Weekly Circular 3674 week ending 09/08/2015 is superseded by the issue of this notice and should be discarded. The previous notice is amended by the addition of the bracketed text ('*where provided*') in bullet point 2 in the below instruction.

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All concerned, in addition to the current instructions outlined in Rule Book Section N (Part Two), the Pilotman and Signalman must ensure the following arrangements are carried out during the operation of the Pilot Working Key Switch:

- The Pilotman must confirm to the Signalman that the correct Pilot Working Key Switch for the section concerned has been operated.
- The Signalman must check the correct Pilot Working Key Switch has been operated by observation of the indications (where provided) on the signalling panel and then confirm to the Pilotman the correct switch has been operated.

Please cut out and retain this notice in the Rule Book Section N (Part Two) at Page N33.

**W.C. 3675**

**W.E. 16/08/2015**

**Head of Safety IÉ Infrastructure 400/8**

## 8.0 INSTRUCTIONS TO THE PILOTMAN

### 8.1.2 Arrangements you must make concerning WSLP forms

- first, check that line concerned is clear
- you must then enter the details of the arrangements on a Pilotman's WSLP form (Part A)
- when you have done that, you must dictate a WSLP form to each Signalman who controls the entrance of trains to the section concerned
- record the name of each Signalman on your WSLP form (Part A)

### 8.1.3 Arrangements you must make concerning the Token (where provided)

- you must ensure that the Token is put out of use until normal working is resumed
- take possession of the Token if available where you are appointed
- alternatively, tell the Signalman at the other end to lock the Token in a safe place until your arrival there
- if required to do so, you must hand the Token to the Signal Technician who will retain it until normal working is resumed

### 8.1.4 Arrangements you must make concerning Pilot Working Key Switches (where provided on TCB lines)

- you must ensure that at least one of the switches relevant to the section concerned is operated to the PW position
- where a switch is provided at an Emergency Control Panel which is open when WSLP is being introduced, you must ensure this switch is operated to the PW position



## 8.0 INSTRUCTIONS TO THE PILOTMAN

- where necessary, you must request the Signalman to operate a switch and tell you when this has been done

### 8.1.5 When these arrangements are completed

- WSLP may then start

## 8.2 DURING WORKING BY PILOTMAN

### 8.2.1 What you must understand about authorising movements

- you must be present and personally authorise the Driver of any movement, except as shown in clause 8.2.5, which is to enter or foul the single line
- you must first obtain the permission of the Signalman controlling the entrance to the section before authorising any such movement
- you must also have the Signalman's express permission before authorising any movement to pass a signal at Danger

### 8.2.2 What you must do when authorising movements

- inform the Driver of the circumstances
- instruct the Driver to:
  - pass at Danger the signal controlling the entrance to the single line
  - observe all other signals applicable to that line
- if the train is worked by two or more locomotives, you must give the necessary instructions to each Driver

## 8.0 INSTRUCTIONS TO THE PILOTMAN

### 8.2.3 When you must ride with the Driver

- do this unless there is another train to follow
- if the train is worked by two or more locomotives, travel with the Driver of the rearmost
- you must, however, accompany every train if the Signalman tells you this is required by Train Signalling Regulations

### 8.2.4 What you must do on arrival at the end of the section

- tell the Signalman of your arrival immediately
- do this each time on arrival except at locations from which trains are normally permitted to return without the Signalman's permission being obtained

**REMINDER:** where you have not been able to take possession of the Token previously, you must retrieve this from the Signalman immediately when arriving for the first time

### 8.2.5 What you must do if a train fails on the single line

- if accompanying a train which fails, you must:
  - confer with the Driver before the Driver arranges for assistance
  - ask the Driver to inform the Signalman of the circumstances and to relay your permission for an assisting train to enter the section
  - remain with the failed train until assistance arrives
  - then accompany the Driver of the assisting train

## 8.0 INSTRUCTIONS TO THE PILOTMAN

- if a train fails while not accompanied by you, the Signalman will obtain your permission before allowing the assisting train to enter the section
- you must accompany the assisting train if it comes from and will return to the rear

### 8.2.6 What you must arrange if a train is to work at an intermediate ground frame

**NOTE:** this applies where the ground frame is released by the Token but a Token is not available

- you must show the Signal Technician your Pilotman's form
- you may then request the Technician to release a Token
- you must keep this Token in your possession until it is returned to the Technician or normal working is resumed
- on a Manual Token Working line, you must, instead, request the Technician to attend the ground frame, and, in your presence, unlock and subsequently relock the ground frame to enable the work to take place

### 8.2.7 What you must understand concerning Pilot Working Key Switches

- any switch which has been operated to the PW position must remain so until WSLP is withdrawn
- you may, however, permit the operation of a switch to the NW position for testing purposes when requested by the Signal Technician provided:
  - you are present at one or other end of the section concerned
  - there is no train in the section

## 8.0 INSTRUCTIONS TO THE PILOTMAN

- if there is a train waiting at or approaching a signal leading to the section, the Driver has been told to stop at that signal even if a proceed aspect is shown while the test takes place

### 8.2.8 What you must do when relieved

- make sure your relief fully understands the arrangements
- give your Pilotman's form, armllet and, if in your possession, the Token to your relief
- tell each Signalman and give the name of your relief
- afterwards, do not ride in the driving cab of any train over the single line

### 8.2.9 What you must do when relieving a Pilotman

- make sure you fully understand the arrangements
- take possession of the Pilotman's form, armllet and, where appropriate, the Token
- sign the Pilotman's form (Part C)

### 8.2.10 What you must do when a Signalman is relieved

- the new Signalman will tell you when taking duty
- note the new Signalman's name and the time on your Pilotman's form (Part B)

## 8.0 INSTRUCTIONS TO THE PILOTMAN

### 8.3 WHEN WORKING BY PILOTMAN IS TO BE WITHDRAWN

#### 8.3.1 When WSLP is no longer required

- the Signalman will tell you when WSLP is no longer required
- you must then arrange for WSLP to be withdrawn as shown below

#### 8.3.2 What you must do before WSLP is withdrawn

- check that the last train is clear

#### 8.3.3 When WSLP is to be withdrawn

- tell each Signalman to cancel their Signalman's WSLP form
- arrange for any Pilot Working Key Switches which are in the PW position to be operated to NW
- obtain an assurance that this has been done
- then cancel your own WSLP form (Part D)
- normal working may then resume unless the line is to close before the failure is rectified
- send your cancelled form to the Local Manager

## 9.0 INSTRUCTIONS TO SIGNALMEN

### 9.1 BEFORE WORKING BY PILOTMAN STARTS

#### 9.1.1 What you must agree with the Pilotman

- the details of the arrangements to apply including:

## 9.0 INSTRUCTIONS TO SIGNALMEN

- whether all trains must be accompanied by the Pilotman in accordance with the Train Signalling Regulations
- the time(s) you expect to be relieved during WSLP

### 9.1.2 Arrangements you must make concerning WSLP forms

- the Pilotman will dictate a WSLP form to you when WSLP is to start
- enter the details, as dictated, on a Signalmen's WSLP form (Part A) and record the Pilotman's name
- read back the completed entry to the Pilotman
- enter the details in the Train Register

### 9.1.3 Arrangements you must make concerning the Token (where provided)

- after the WSLP form (Part A) has been completed, you must hand the Token to the Pilotman, if present
- alternatively, you must lock the Token in a safe place and hand it to the Pilotman on arrival

### 9.1.4 When these arrangements are completed

- WSLP may then start

## 9.0 INSTRUCTIONS TO SIGNALMEN

### 9.2 DURING WORKING BY PILOTMAN

#### 9.2.1 When you may authorise movements to enter the single line

- you may authorise movements to enter or foul the single line only as permitted in the Train Signalling Regulations
- you must not give such authority unless the Pilotman is present where the movement is to enter or foul the single line except as shown in clause 9.2.3

#### 9.2.2 What you must record in the Train Register

- you must record the time at which each train enters and leaves the section
- this applies whether or not such booking is normally required

#### 9.2.3 What you must do if a train fails on the single line

- you must obtain the Pilotman's permission before authorising the assisting train to enter the section
- if the Pilotman is accompanying the failed train, this permission may be relayed by the Driver of the failed train when arranging for assistance

#### 9.2.4 What you must do when relieved or relieving

- when relieved, make sure your relief fully understands the arrangements for WSLP
- when relieving, sign the WSLP form (Part B) in the presence of the Signalman being relieved and tell the Pilotman you have taken charge

## 9.0 INSTRUCTIONS TO SIGNALMEN

### 9.2.5 What you must do when closing or re-opening a signal box

- if the line is to close, make a note of the circumstances in the Train Register and leave your WSLP form in the Train Register Book
- when re-opening after line closure, you must immediately sign the WSLP form (Part B) which has been left in the Train Register Book

### 9.2.6 What you must do when the Pilotman is relieved

- enter the name of the new Pilotman and the time on your WSLP form (Part C)

## 9.3 WHEN WORKING BY PILOTMAN IS TO BE WITHDRAWN

### 9.3.1 When WSLP is no longer required

- before WSLP is withdrawn, you must:
  - confer with the other Signalman
  - tell the Pilotman that arrangements to withdraw WSLP may start

### 9.3.2 What the Pilotman is required to do

- when the last train is clear, the Pilotman will then arrange for WSLP to be withdrawn

### 9.3.3 What you are required to do

- cancel your WSLP form (Part D) when instructed to do so by the Pilotman



## 9.0 INSTRUCTIONS TO SIGNALMEN

- tell the Pilotman when you have done this
- make an entry in the Train Register that normal working is being resumed

**NOTE:** where appropriate, the Signal Technician will restore the Token to the instrument

- send your cancelled form to the Local Manager

### 9.3.4 When WSLP is to be withdrawn before the failure is rectified

- this applies only as shown in clause 7.5
- you must observe the instructions in this clause 9.3 except that you must make an entry in the Train Register that normal working remains suspended

## 10.0 INSTRUCTIONS TO DRIVERS

### 10.1 WHAT YOU MUST UNDERSTAND ABOUT ENTERING OR FOULING THE SINGLE LINE

- you must have the personal authority of the Pilotman
- this applies in all circumstances unless your train is to enter the single line to assist a failed train
- the Pilotman will travel with you unless following on a subsequent train or riding on the rearmost locomotive

### 10.2 WHAT YOU MUST UNDERSTAND ABOUT THE OBSERVANCE OF SIGNALS

- when passing over the single line, you must observe all signals applicable to that line

## 10.0 INSTRUCTIONS TO DRIVERS

- do not pass any signal at Danger unless authorised by the Signaller, Pilotman or Crossing Keeper

### 10.3 WHAT YOU MUST DO IF YOUR TRAIN FAILS

- you must arrange for assistance in accordance with Section M
- if accompanied by the Pilotman, you must first confer with that person and relay to the Signaller the Pilotman's permission for an assisting train to enter the section
- the Pilotman will remain with your train until assistance arrives

## WORKING OF SINGLE LINES BY PILOTMAN PILOTMAN'S FORM

### PART A

### ARRANGEMENTS

**Location** \_\_\_\_\_ **Date** \_\_\_\_\_

In connection with

a failure of the signalling equipment\*

working to and from an obstruction\*

I have been appointed by \_\_\_\_\_ to act as Pilotman between  
\_\_\_\_\_ and \_\_\_\_\_

*\* Delete as appropriate*

Rule Book, Section N, Part 2 "Working of Single Lines by Pilotman" will apply.

This information has been dictated to the following Signalmen:

Signal Box	Name of Signalman	Time Dictated

Signed (Pilotman) \_\_\_\_\_

## WORKING OF SINGLE LINES BY PILOTMAN PILOTMAN'S FORM

### PART B

#### CHANGE OF SIGNALMAN

<b>Signal box at:</b>				
Changeover	Name	Time/Date	Name	Time/Date
<b>1st</b>				
<b>2nd</b>				
<b>3rd</b>				
<b>4th</b>				

### PART C

#### CHANGE OF PILOTMAN

##### This form noted by

	at		time/date
	at		time/date
	at		time/date

### PART D

#### CANCELLATION OF WORKING BY PILOTMAN

Cancellation of Working by Pilotman dictated to:

##### Signal Box    Name of Signalman    Time Form Cancelled


This form cancelled at \_\_\_\_\_ Time / Date

Signed \_\_\_\_\_ (Pilotman)

## WORKING OF SINGLE LINES BY PILOTMAN SIGNALMAN'S FORM

### PART A

#### ARRANGEMENTS

**Signal box** \_\_\_\_\_ **Date** \_\_\_\_\_

I have been instructed that because of

- a failure of the signalling equipment
- working to and from an obstruction

Rule Book, Section N, Part 2 "Working of Single Lines by Pilotman"

will apply between \_\_\_\_\_ and \_\_\_\_\_

Form completed at the dictation of \_\_\_\_\_

who will act as Pilotman and who is present / speaking from \_\_\_\_\_

at \_\_\_\_\_ time / date

Signed \_\_\_\_\_ (Signalman)

### PART B

#### CHANGE OF SIGNALMAN

Form Noted by	Time	Date

## WORKING OF SINGLE LINES BY PILOTMAN SIGNALMAN'S FORM

### PART C

#### CHANGE OF PILOTMAN

Name of new Pilotman	Noted by Signalman ( <i>name</i> )	Time/Date

### PART D

#### CANCELLATION OF WORKING BY PILOTMAN

This form cancelled at the dictation of \_\_\_\_\_ who is  
present / speaking from\* \_\_\_\_\_ at \_\_\_\_\_ Time/Date

Signed \_\_\_\_\_ (Signalman)

\* Delete as appropriate

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Prepared by	N.Blakeley
Checked by	P.Tuohy
Approved by	K.Doyle

# **SECTION N**

## **PART 3**

**SINGLE LINE WORKING BY  
REMOTE PILOTMAN**

**BRIEFING COPY**

**THIS PAGE IS  
NOT USED**



# **SINGLE LINE WORKING BY REMOTE PILOTMAN**

## 11.0 PRINCIPLES

### 11.1 GENERAL

- Single Line Working by Remote Pilotman (SLWRP) may be introduced whenever the traffic of a double line needs to be worked over one line due to the failure of a train causing an obstruction and the other line is not signalled for bi-directional working
- SLWRP may only be introduced on designated lines which are within the area controlled by Dublin Central Traffic Control (CTC) and under the control of one signalman

### 11.2 WHEN SINGLE LINE WORKING BY REMOTE PILOTMAN IS PERMITTED

- SLWRP may only be introduced if the following conditions on the affected lines can be met :
  - Single Line Working in accordance with Section N Part One has not been pre-arranged and is not already in place
  - SLWRP is not already in operation over another section of line controlled by the same signalman
  - the obstructed line is not under absolute possession
  - the single line is clear
  - the failure of a train is causing the obstruction
  - all of the following items / systems are functioning correctly over the line where SLWRP is to be conducted:
    - points and signals
    - train radio
    - track circuits and axle counters
  - auto routing has been cancelled over the affected route
  - all points can be set, detected and blocked throughout the route

## 11.0 PRINCIPLES

- the signalman has received confirmation that there will be no movements on the obstructed line unless authorised by the signalman

### 11.3 APPOINTMENT OF A REMOTE PILOTMAN

- the duty manager at Dublin CTC must appoint a remote pilotman
- this person must not undertake any other duties while acting as remote pilotman
- this person may only act as remote pilotman over one section of line at any one time

### 11.4 WHEN THE REMOTE PILOTMAN MUST BE IN THE SIGNALMANS PRESENCE

- the remote pilotman must be in the signalman's presence during the whole time that:
  - arrangements are being made to introduce or withdraw SLWRP
  - route setting is taking place for a movement to enter, leave or move within the SLWRP section
  - a movement authorised by the remote pilotman is taking place
  - a movement authorised by the signalman over the obstructed line is taking place
- the signalman and the remote pilotman must both observe the track circuit and axle counter indications as the movement travels over the single line section

## 11.0 PRINCIPLES

### 11.5 THE OBSTRUCTED LINE MUST BE PROTECTED

- signals protecting the obstructed line must be maintained at danger to protect the failed train, unless an assisting train is required to travel over the obstructed line to assist the failed train
  
- the signaller must use the necessary reminder appliances to protect the obstructed line
  - the reminder appliance must be placed / set after an assurance is received from the driver of the failed train on the obstructed line that it will not be moved without the permission of the signaller

### 11.6 SLWRP FORM

- when SLWRP is to be introduced, the remote pilotman must first complete the SLWRP form appropriate to the section concerned;
  - the signaller must check the details inserted by the remote pilotman on the form are correct before countersigning the form
  - the signaller must then enter the details of the SLWRP in the train register
  - the remote pilotman must also countersign the train register entry

### 11.7 TRAIN RADIO MUST BE WORKING

- only trains fitted with onboard train radio may be authorised to enter the SLWRP section
  
- the train radio must be working on any train required to enter the SLWRP section
  
-

## **11.0 PRINCIPLES**

### **11.8 ABBREVIATION OF THE TERM 'STOP AND OBTAIN INSTRUCTIONS BOARD**

- where the abbreviation SAOIB is used in this section, all concerned should understand the abbreviation to mean 'Stop and Obtain Instructions Board'

## 12.0 GENERAL INSTRUCTIONS

### 12.1 ESTABLISHING THE SINGLE LINE SECTION IS CLEAR

- the remote pilotman must confirm with the signalman that the single line section is clear before SLWRP is introduced

### 12.2 RESPONSIBILITY FOR MOVEMENTS

- the remote pilotman is responsible for authorising all movements entering, fouling, passing over or leaving the SLWRP section
- the remote pilotman must first obtain the signalman's permission before granting authority for any movement

### 12.3 TRAIN STRIP MACHINE

- a reminder appliance known as the train strip machine (TSM) is provided to assist the remote pilotman in carrying out his duties
- all trains to enter the SLWRP section are subject to a train strip which must be inserted in to the TSM
- before a train can enter the SLWRP section the driver must be in possession of a completed SLWRP ticket which has been dictated by the remote pilotman
- before dictating a SLWRP ticket to a driver, the remote pilotman must enter the following details on to the train strip:
  - train ID
  - time the train is entering the SLWRP section
  - entry signal number (right direction movements only)
- the train strip may then be entered in to the TSM

## 12.0 GENERAL INSTRUCTIONS

- the train strip must remain in the TSM until the movement has passed clear of the SLWRP section
- only one wrong direction train strip is to be inserted in the TSM at any time
- if, due to failure of a train on the single line, an assisting train is required to enter the SLWRP section, the train strip applicable to the failed train requiring assistance must also be endorsed with the following information:
  - the ID of the assisting train
  - the time the assisting train entered the SLWRP section
  - the time the failed train and the assisting train left the SLWRP section

### 12.4 FAILURE OF SIGNALLING EQUIPMENT DURING SLWRP

- in the event of a failure of track circuits, axle counters, points or signals during SLWRP, normal procedures for dealing with such failures apply
- in the event of the failure or irregular occupancy of a track circuit or axle counter located immediately before or immediately in advance of the SAOIB, any train approaching the SAIOB must be stopped and the driver advised of the circumstances
- once the signalman establishes it is in order for the train to continue, the driver must be further advised to proceed cautiously at a speed which will enable the train to stop short of any obstruction up to the SAOIB

## 12.0 GENERAL INSTRUCTIONS

### 12.5 SECURING OF UNWORKED POINTS

- the remote pilotman must arrange for a nominated competent person to secure and padlock any unworked points and to place a green hand signal at the points visible to any train approaching in the wrong direction. The nominated person must retain the padlock keys and advise the remote pilotman when this has been done

### 12.6 CONTROL OF MOVEMENTS OVER THE SLWRP SECTION IN THE RIGHT DIRECTION

- signals provided to control movements over the SLWRP section in the right direction, including signals worked by a crossing keeper / level crossing controller, must be worked as per normal signalling arrangements whenever possible
- the signalman must first obtain the remote pilotman's permission before setting the route and confirm when this has been done

### 12.7 CONTROL OF MOVEMENTS OVER THE SLWRP SECTION IN THE WRONG DIRECTION

- the route over the SLWRP section, including the crossover where the train movement will return to the line of normal direction of travel must be set and locked throughout before a wrong direction movement is authorised to enter the single line
- drivers of trains operating in the wrong direction over the SLWRP section must disregard the meaning of any signal relating to the obstructed line
- all level crossings must be closed to road traffic before a wrong direction movement is authorised to enter the SLWRP section



## 12.0 GENERAL INSTRUCTIONS

- remotely controlled CCTV level crossings must be lowered prior to the movement entering the SLWRP section and remain lowered until the complete movement has passed over the level crossing
- authorisation for a movement to pass over a CCTV level crossing under the control of an emergency operator must be given verbally by the emergency operator
- movements over other manned level crossings being locally operated must not take place unless a green handsignal is displayed by the crossing keeper
- SAOIBs are provided opposite the signal protecting the crossover where trains return to the proper line;
  - movements must stop at these SAOIBs and not proceed until authorised by the remote pilotman
  - this authority must be noted by the driver on Part C of the SLWRP ticket
- at certain locations a controlled main aspect stop signal is provided instead of a SAOIB
  - movements must not proceed beyond these stop signals unless authorised by the remote pilotman

### 12.8 AUTHORITY FOR MOVEMENTS TO ENTER OR FOUL THE SLWRP SECTION

- the remote pilotman must authorise any movement to enter or foul the SLWRP section
- the remote pilotman must first obtain the signalman's permission for each such movement
- the driver must complete Part A of the SLWRP ticket which has been dictated to him by the remote pilotman
- the driver must reach a clear understanding with the remote pilotman as to what is required and then must complete Part B of the SLWRP ticket, before the movement starts

## 12.0 GENERAL INSTRUCTIONS

- before the movement begins the remote pilotman must confirm with the signalman that no conflicting train/rail movement will take place on the obstructed line
- with the signalman's permission, the remote pilotman may then authorise the driver to enter or foul the SLWRP section

### 12.9 WHEN SLWRP MAY BE WITHDRAWN

- authorisation for the withdrawal of SLWRP may be granted by the remote pilotman when the following conditions have been met:
  - SLWRP is no longer required
  - the SLWRP section is confirmed as clear
  - all concerned parties have been advised that SLWRP is no longer required
  - the instructions on the SLWRP form for the withdrawal of SLWRP have been observed

## 13.0 INSTRUCTIONS TO THE REMOTE PILOTMAN

### 13.1 BEFORE SLWRP STARTS

#### 13.1.1 What you must check with the signalman

- the details of the SLWRP arrangements
- Single Line Working in accordance with Section N Part One has not been pre-arranged and is not already in place on the lines affected.
- SLWRP is not already in operation over another section of line controlled by the same signalman
- the single line is clear
- the obstructed line is not under absolute possession
- the failure of a train is causing the obstruction
- all of the following items / systems are functioning correctly over the line where SLWRP is to be conducted:
  - points and signals
  - train radio
  - track circuits and axle counters
- auto routing has been cancelled over the affected route
- all points can be set, detected and blocked throughout the route
- the signalman has received confirmation from the driver of the failed train on the obstructed line that no movement will take place unless authorised by the signalman
- the signalman has placed the protecting signals at danger and used the necessary reminder appliances to protect the obstructed line
- any crossing keeper or level crossing controller concerned has been told that SLWRP is being introduced and told what arrangements will apply

## 13.0 INSTRUCTIONS TO THE REMOTE PILOTMAN

### 13.1.2 What you must also do and confirm to the signalman

- make arrangements to ensure that any unworked points are secured, padlocked and that a green handsignal is displayed so that it is visible to the driver of any train approaching in the wrong direction
- check whether there are any temporary or emergency speed restrictions on the SLWRP section

### 13.1.3 Arrangements you must make concerning the SLWRP form

- provided the conditions in clause 13.1.1 can be met, and the actions in 13.1.2 have been undertaken you may complete a SLWRP form
- you must then enter the details of the arrangements on the designated SLWRP form which is appropriate for the section concerned
- you must sign the form when you are satisfied that it is complete and correct and get the signalman to countersign it
- the signalman will enter the details of the SLWRP in the train register which you must also countersign

### 13.1.4 Arrangements you must make after the SLWRP form is issued

- you and the signalman must observe the instructions on the form which apply to the section of line concerned to enable SLWRP to be introduced
- you must check with the signalman when the necessary arrangements are complete

## 13.0 INSTRUCTIONS TO THE REMOTE PILOTMAN

- SLWRP can then commence at the time agreed with the signalman

### 13.2 DURING SLWRP

#### 13.2.1 When you may authorise movements on the single line

- you must not authorise any movement on the single line unless:
  - you have obtained the signalman's permission for the movement
  - you have completed and entered an appropriate train strip in the TSM
  - you have confirmed train radio communication with the driver and advised the signalman of the same
  - the driver has completed a SLWRP ticket (Parts A and B) at your dictation
  - you have confirmed with the signalman that the failed train on the obstructed line will not be moved without the signalman's authority
- also, when authorising a wrong direction movement:
  - the signalman has confirmed to you that the route over the SLWRP section including the crossover where the train movement will return to the line of normal direction of travel is set, detected and blocked throughout
  - the signalman has confirmed to you that all level crossings in the SLWRP section are closed to road traffic
- the train strip must remain in the TSM until the movement has passed clear of the SLWRP section regardless of the direction of travel of the movement

## 13.0 INSTRUCTIONS TO THE REMOTE PILOTMAN

### 13.2.2 What you must do when authorising movements

- give the necessary information to enable the driver to complete a SLWRP ticket (Part A), indicating between which crossovers and on which line SLWRP applies, also:
  - make sure that the driver clearly understands which crossover is being used where there is more than one at either end of the section
- advise the driver of the first train, to travel through the SLWRP section at caution and to stop where necessary in the section in order to tell everyone on or near the line that SLWRP applies
- make sure the driver clearly understands this information and request the driver to repeat back the details entered on to Part A of the SLWRP ticket.
- having reached a clear understanding with the driver as to what is required, you must give the following details which the driver will enter on the SLWRP ticket (Part B):
  - details of the authority to proceed (signal to be obeyed / disregarded / to be passed at danger and line to proceed onto the SLWRP section)
  - your name and the location from where you are speaking
  - time and date of issue of authority
- ask the driver to read back the details entered on the SLWRP ticket (Part B)
- provided you are sure the details are correct, you may instruct the driver to proceed

## 13.0 INSTRUCTIONS TO THE REMOTE PILOTMAN

### 13.2.3 What you must also do when authorising movements in the wrong direction

- remind the driver of the presence of any SAOIB
- instruct the driver not to pass any SAOIB until authorised by you; this authority must be noted by the driver on Part C of the ticket
- advise the driver to stop his train short of any level crossing in the SLWRP section and instruct the driver:
  - not to pass over a CCTV type level crossing until the driver can visually confirm the barriers are closed to road traffic
  - not to proceed over a locally manned level crossing unless a green handsignal is displayed by the crossing keeper
- advise the driver if an emergency operator has been appointed to attend at a CCTV type level crossing and not to pass over the crossing until verbally authorised by the emergency operator
- remind the driver of the presence of any unworked points and temporary or emergency speed restrictions

### 13.2.4 Observing the train movement over the SLWRP section

- both you and the signalman must observe train movements travelling over the SLWRP section regardless of direction of travel
- should you observe a movement travelling in the wrong direction occupy the track circuit or axle counter section immediately beyond the SAOIB without authorisation, you must treat the matter as a train proceeding without authority

## 13.0 INSTRUCTIONS TO THE REMOTE PILOTMAN

- you must immediately arrange for the train concerned, and any other train which may be endangered, to be stopped by use of train radio (or any other means giving communication)

### 13.2.5 What you must do when informed by a driver that a train has passed clear of the single line

- you must remove the relevant train strip from the TSM
- you must record on the train strip the time when the train concerned passed clear of the section
- you must inform the signalman accordingly

### 13.2.6 What you must do if a train fails on the single line

- you are responsible for authorising the entry of any assisting train on to the SLWRP section but you must first obtain the permission of the signalman for the movement
- you must complete a SLWRP ticket with the driver of the assisting train and endorse the train strip for the failed train with the following additional details:
  - the ID of the assisting train
  - the time the assisting train entered the section
- the train strip for the failed train must not be removed from the TSM until you are satisfied that both the failed and assisting trains are clear of the SLWRP section
- once removed, the train strip must be endorsed with the time that the failed train and assisting train exited the SLWRP section



## 13.0 INSTRUCTIONS TO THE REMOTE PILOTMAN

### 13.2.7 Failure of signalling equipment

- in the event of a failure of track circuits, axle counters, points or signals during SLWRP normal procedures for dealing with such failures apply

### 13.2.8 Failure or irregular occupancy of a track circuit or an axle counter located immediately before, or immediately in advance of the SAOIB

- in the event of the failure or irregular occupancy of a track circuit or axle counter located immediately before, or immediately in advance of the SAOIB, you must contact the driver of any train approaching the SAOIB and instruct him to stop his train
- the signalman will then confirm to you if it is in order for the train to continue
- you must then advise the driver of the circumstances before instructing him to proceed cautiously at a speed which will enable the train to stop short of any obstruction up to the SAOIB

### 13.2.9 What you must do when relieved or relieving

- when relieved, make sure your relief understands the arrangements
- when relieving, sign the SLWRP form and the train register in the presence of your relief and the signalman

## 13.0 INSTRUCTIONS TO THE REMOTE PILOTMAN

### 13.3 WHEN SLWRP IS TO BE WITHDRAWN

#### 13.3.1 When SLWRP is no longer required

- you must tell the signalman when SLWRP is no longer required

#### 13.3.2 What you must do before SLWRP is withdrawn

- check that the last train is clear of the SLWRP section
- tell each crossing keeper/ level crossing controller affected that SLWRP is being withdrawn
- observe the instructions on the SLWRP form for the withdrawal of SLWRP

#### 13.3.3 When normal working may be resumed

- make sure the arrangements in clause 13.3.2 are completed
- you must countersign the signalman's cancelling entry on the SLWRP form and in the train register
- normal working may then resume
- all completed SLWRP forms must be handed to the duty manager

## 14.0 INSTRUCTIONS TO THE SIGNALMAN

### 14.1 BEFORE SLWRP STARTS

#### 14.1.1 What you must check with the remote pilotman

- the details of the SLWRP arrangements
- Single Line Working in accordance with Section N Part One has not been pre-arranged and is not already in place on the lines affected.
- SLWRP is not already in operation over another section of line under your control
- the single line is clear
- the obstructed line is not under absolute possession
- the failure of a train is causing the obstruction
- that any unworked points are secured, padlocked and that a green handsignal is displayed so that it is visible to the driver of any train approaching in the wrong direction
- whether there are any temporary or emergency speed restrictions on the line to be used for SLWRP

#### 14.1.2 What you must also do and then confirm to the remote pilotman

- check all of the following items / systems are functioning correctly over the line to be used for SLWRP:
  - points and signals
  - train radio
  - track circuits and axle counters
- cancel auto routing over the affected route
- check all points can be set, detected and blocked throughout the route

## 14.0 INSTRUCTIONS TO THE SIGNALMAN

- contact and receive an assurance from the driver of the failed train on the obstructed line that it will not be moved without your permission
- ensure the protecting signals for the obstructed line are maintained at danger and that the necessary reminder appliances to protect the obstructed line have been applied
- advise any crossing keeper/ level crossing controller concerned that SLWRP is being introduced and what arrangements will apply

### 14.1.3 Arrangements you must make concerning the SLWRP form

- provided the conditions in clause 14.1.1 can be met and the actions in clause 14.1.2 have been undertaken the remote pilotman will issue a SLWRP form at the time agreed for the SLWRP to start
- you must check that this form is complete and correct and is appropriate for the section concerned
- you must then countersign this form
- you must enter the details of the SLWRP in the train register and get the remote pilotman to countersign it

### 14.1.4 Arrangements you must make after the SLWRP form is issued

- you (and the remote pilotman) must observe the instructions on the form which apply to the section of line concerned to enable SLWRP to be introduced
- you must check with the remote pilotman when the necessary arrangements are complete

## 14.0 INSTRUCTIONS TO THE SIGNALMAN

- you must then add to the train register entry you have already made:  
"Single Line Working By Remote Pilotman started at ..... (time)"
- this must be countersigned by the remote pilotman
- SLWRP may then commence at the time agreed with the remote pilotman

### 14.2 DURING SLWRP

#### 14.2.1 When you may give permission for movements on the single line

- the remote pilotman will authorise movements which are to:
  - enter or foul the SLWRP section
  - pass a SAOIB, including that protecting the crossover where movements return to the proper line
- the remote pilotman is required to obtain your permission before authorising any such movement
- you must not give such permission unless:
  - the line is clear in accordance with the Signalman's General Instructions, TCB Regulation 13
  - the remote pilotman has confirmed to you that train radio communication with the driver is available
  - you have confirmed to the remote pilotman that no authorised conflicting movement will take place on the obstructed line
  - the remote pilotman has inserted a train strip for the movement concerned in the TSM

## 14.0 INSTRUCTIONS TO THE SIGNALMAN

- the train strip must remain in the TSM until the movement has passed clear of the SLWRP section
- you must set and maintain the correct route for each movement and you must not clear any signal onto the SLWRP section without first ensuring that the remote pilotman has authorised the movement
- also, before giving permission for a wrong direction movement to enter the SLWRP section you must:
  - set the route throughout the SLWRP section including the crossover where the train movement will return to the line of normal direction of travel and confirm to the remote pilotman that the route is set, detected and blocked throughout
  - ensure all level crossings in the SLWRP section are closed to road traffic

### 14.2.2 Observing the train movement over the SLWRP section

- both you and the remote pilotman must observe train movements travelling over the SLWRP section regardless of direction of travel
- should you observe a movement travelling in the wrong direction occupy the track circuit or axle counter section immediately beyond the SAOIB without authorisation, you must treat the matter as a train proceeding without authority
- you must immediately arrange for the train concerned and any other train which may be endangered to be stopped by use of train radio (or any other means giving communication)

## 14.0 INSTRUCTIONS TO THE SIGNALMAN

### 14.2.3 When the train has passed clear of the SLWRP section

- the remote pilotman will advise you when the train is confirmed clear of the SLWRP section

### 14.2.4 When you may authorise movements on the obstructed line

- you must not permit any movement on the obstructed line towards the crossovers in use at either end of the SLWRP section until any conflicting movement working over the SLWRP section has passed clear of the crossover
- after giving such permission, you then must not permit a conflicting movement from the SLWRP section over the crossover until the movement from the obstructed line has passed clear or is completed

### 14.2.5 What you must do if a train fails on the single line

- the remote pilotman is responsible for authorising the movement of an assisting train on to the SLWRP section
- however, the remote pilotman must first obtain your permission for such movement

### 14.2.6 Failure of signalling equipment

- in the event of a failure of track circuits / axle counters, points or signals during SLWRP, normal procedures for dealing with such failures apply

## 14.0 INSTRUCTIONS TO THE SIGNALMAN

### 14.2.7 Failure or irregular occupancy of a track circuit or an axle counter located immediately before or immediately in advance of the SAOIB

- in the event of the failure or irregular occupancy of a track circuit or axle counter located immediately before or immediately in advance of the SAOIB, the remote pilotman will contact and advise the driver of any movement approaching to stop their train and confirm the same to you
- you must then ascertain the nature of the irregular occupancy or track circuit / axle counter failure
- if it is permissible for the train to continue, you must advise the remote pilotman accordingly
  - the remote pilotman will then advise the driver to proceed cautiously at a speed which will enable the train to stop short of any obstruction up to the SAOIB

### 14.2.8 What you must do when relieved or relieving

- when relieved, make sure your relief fully understands the arrangements for SLWRP
- when relieving, sign the SLWRP form and the train register in the presence of the signalman being relieved and the remote pilotman

## 14.3 WHEN SLWRP IS TO BE WITHDRAWN

### 14.3.1 When SLWRP is no longer required

- the remote pilotman will tell you when SLWRP is no longer required



**14.0 INSTRUCTIONS TO THE SIGNALMAN**

**14.3.2 What you must do before SLWRP is withdrawn**

- observe the instructions on the SLWRP form for the withdrawal of SLWRP

**14.3.3 When normal working may be resumed**

- make sure the arrangements in clause 14.3.2 are completed
- cancel the SLWRP form and hand it to the remote pilotman
- when you have done this, you must make and sign an entry in the train register, as follows:  
    “SINGLE LINE WORKING BY REMOTE PILOTMAN on the  
    ..... line between..... and  
    .....cancelled at.....(time)”
- the remote pilotman will countersign this entry
- normal working may then resume

## 15.0 INSTRUCTIONS TO DRIVERS

### 15.1 BEFORE ENTERING OR FOULING THE SLWRP SECTION

- the remote pilotman will give you the necessary information to enable you to complete a SLWRP ticket (Part A) including:
  - which line is being used for SLWRP
  - precisely which crossover is being used at each end
  - any location(s) where your train will be controlled by handsignals or be required to stop at a SAOIB or Stop Signal where provided for wrong direction movements
  - the location of the failed train on the obstructed line
  - any other instructions applicable to the movement
- you must record the details provided on Part A of the SLWRP ticket and then read back to the remote pilotman the details you have entered
- having reached a clear understanding with the remote pilotman as to what is required, the remote pilotman will then provide you with the details to complete Part B of the SLWRP ticket
- you must record the details provided on Part B of the SLWRP ticket and then read back to the remote pilotman the details which have been entered
- the remote pilotman must satisfy himself that the details inserted on to Parts A and B of the SLWRP form are correct before authorising the movement to proceed

**IMPORTANT:** you must not proceed on to the SLWRP section until verbally authorised by the remote pilotman

## 15.0 INSTRUCTIONS TO DRIVERS

### 15.2 WHAT YOU MUST DO WHEN AUTHORISED TO ENTER OR FOUL THE SLWRP SECTION

- make sure you clearly understand:
  - when passing over the SLWRP section in the right direction, you must obey all the signals applicable to that line
  - do not pass any signal at danger unless authorised
  - you must inform the remote pilotman when your train has passed clear of the single line
- you may be instructed by the remote pilotman to stop where necessary in the section in order to tell everyone on or near the line that SLWRP applies

### 15.3 WHAT YOU MUST ALSO UNDERSTAND IF IN CHARGE OF A TRAIN TRAVELLING IN THE WRONG DIRECTION OVER THE SLWRP SECTION

- when passing over the SLWRP section in the wrong direction you must disregard signals applicable to the blocked line
- you must proceed cautiously - do not exceed 80kph (50mph)
  - the speed of your train must be further reduced where the approach view of trains is restricted so that adequate warning will be given to anyone on or near the line
  - do not exceed 16kph (10 mph) over crossovers and unworked points
- a green handsignal will be displayed at any unworked points as an indication they are secured for movements over the points in the wrong direction.
- frequently give a series of short blasts on the horn in order to give adequate warning to anyone on or near the line.

## 15.0 INSTRUCTIONS TO DRIVERS

- you must stop your train short of any level crossings in the SLWRP section
  - you must not pass over a CCTV level crossing without visually confirming that the barriers are fully lowered and the crossing is closed to road traffic
  - if you have been previously advised by the remote pilotman that an emergency operator has been appointed at a CCTV level crossing, you must not proceed over the crossing until verbally authorised by the emergency operator at the crossing
  - authority to proceed over a manned level crossing which is locally operated will be indicated by the crossing keeper displaying a green handsignal
- The limits of movements in the wrong direction are indicated by a SAOIB or a stop signal provided for wrong direction movements capable of displaying a main aspect

### 15.3.1 What you must understand about the observance of SAOIB or signals provided for wrong direction movements capable of displaying a main aspect

- you must not pass any such location unless the appropriate instructions are obtained from the remote pilotman authorising you to proceed
- this authority must be noted by you on Part C of the ticket
- you must inform the remote pilotman when your train has passed clear of the SLWRP section

### 15.4 WHAT YOU MUST DO IF YOUR TRAIN FAILS

- you must arrange for assistance in accordance with Section M of the Rule Book

## **15.0 INSTRUCTIONS TO DRIVERS**

### **15.5 DISPOSAL OF SLWRP TICKETS**

- you must cancel the ticket after leaving the SLWRP section and hand it in when booking off duty

**THIS PAGE IS  
NOT USED**

# **SECTION Q**

**PART ONE:  
ROAD-RAIL VEHICLES**

**PART TWO:  
ON-TRACK MACHINES**

**PART THREE:  
PLANT**

Not Used



# **PART ONE**

## **ROAD-RAIL VEHICLES**

## 1.0 PRINCIPLES

### 1.1 PRINCIPLES

- Road Rail Vehicles (RRVs) are not permitted to work outside the limits of a possession, or in the case of a siding, without a T4 protection arrangement in place
- RRVs must not be relied on to operate track circuits
- Only certified RRVs and Trailers may be used
- Rule Book Section T Part 2, Section T Part 3 or Section T Part 4 protection must be in place on any line that may be fouled or obstructed by a Road Rail Vehicle (RRV) or Trailer

## 2.0 GENERAL INSTRUCTIONS

### 2.1 TERMS USED IN THIS SECTION Q PART ONE

**TABLE Q1**

<b>TERM</b>	<b>MEANING</b>
Road-Rail Vehicle(s) (RRV or RRVs)	Vehicles with road wheels and rail wheels enabling them to run over public roads or along the railway. The term RRV also includes dumpers, trailers and attachments with guidance wheels. Also includes Rail Mounted Maintenance Machines (RMMMs) on NIR network.
Trailer	A non-self-propelled rail mounted vehicle capable of being towed or propelled.
Road Rail Vehicle Controller (RRVC)	A person competent to control the use of one or more RRV within a possession.
Road Rail Vehicle Operator (RRVO)	A person competent to drive and operate a RRV within a possession.
On-tracking	Placing a RRV on the line.
Off-tracking	Removing a RRV from the line.
Travelling	A movement of a RRV in rail mode. The RRV must be in travel mode with all equipment safely stowed away.
Working	A RRV being used in rail mode for any purpose other than travelling.
PICOP	The person in charge of a possession. This person authorises all movements within the possession, except those entering and within a work site.
ES	The engineering supervisor in charge of a work site. This person authorises all movements entering the work site and those within the work site.

## 2.0 GENERAL INSTRUCTIONS

### 2.2 WHEN THIS SECTION APPLIES

- the instructions in this Section Q Part One must be applied to RRVs when:
  - going on or near the line
  - on-tracking
  - travelling
  - working
  - off-tracking
- the instructions contained in this Section Q Part One concerning RRVs also apply to the use of rail mounted Trailers

### 2.3 CONTROL OF ACCESS

- the RRVC is responsible for making sure:
  - the protection arrangements are in place
  - any other line that may be affected is protected
  - emergency equipment is readily available

### 2.4 MAXIMUM PERMITTED SPEED OF RRVs

- RRVs must never exceed 20 mph in rail mode or the speed shown in the cab or on the body of the RRV (if lower), and must never exceed:
  - 5 mph when passing over points and crossings
  - 5 mph when in a worksite

## 2.0 GENERAL INSTRUCTIONS

### 2.5 PERSONNEL REQUIREMENTS

- a competent RRVO is the only person allowed to drive or operate a RRV
- the RRVO may carry out the duties of the RRVC if competent to do so. in this case, another person is not needed

## 3.0 INSTRUCTIONS TO THE RRV

### 3.1 GENERAL

- you must have with you a current certificate of competence to drive and operate the RRV concerned
- you must have been given permission by the RRVC before you:
  - go on or near the line
  - on-track
  - make rail movements with the RRV
  - off-track
- a RRVC must be present when a RRV is:
  - about to go on or near the line
  - on-tracking
  - travelling
  - working
  - off-tracking

## 3.0 INSTRUCTIONS TO THE RRV

- you must never exceed any of the following:
  - 20 mph when in rail mode or the speed shown in the cab or on the body of the RRV (if lower)
  - 5 mph when passing over points and crossings
  - 5 mph when in a worksite
- however, you must make all movements at a speed that will allow you to stop the RRV within the distance you can see is clear
- you must make sure all points are in the correct position for the safe movement of the RRV before passing over them

## 3.2 CHECKING THE RRV AND / OR TRAILER

- before going on or near the line with a RRV and/or Trailer, you must:
  - carry out the checks and tests shown on the pre-operation checklist
    - apart from tests which can only be done when rail-mounted, all tests must be done prior to the RRV and / or Trailer going on or near the line
  - complete all the details required on the checklist
  - sign the checklist and then hand it to the RRVC

## 3.0 INSTRUCTIONS TO THE RRVO

### 3.3 USE OF TRAILERS

- any Trailer that is found to have defective brakes must not be used and must be secured using chains and/or scotches until removed from the line
- no Trailer must be left on the line uncoupled unless first secured by use of parking brakes. In darkness or poor visibility the Trailer must also have a red light placed on both ends of the vehicle
- do not load the Trailer beyond the maximum permitted weight for the Trailer. do not exceed the limitations of the towing vehicle

### 3.4 TRAVELLING IN CONVOY

- where authorised by a PICOP or ES you can be directed to travel in convoy under the control of a RRVC
- you must ensure when travelling in convoy that you understand:
  - how far the movement is to proceed
  - the conditions for the movement
  - where the RRVC will be controlling the movement from
  - a safe distance must be maintained between your RRV and other RRVs in transit

## 3.0 INSTRUCTIONS TO THE RRVO

### 3.5 IF THE RRV IS DERAILED

- you must contact the RRVC immediately
- you must not attempt to re-rail the RRV without first getting permission from the RRVC
- before attempting to re-rail, the RRVC will request you to examine the RRV and establish the fitness of the RRV to continue

## 4.0 INSTRUCTIONS TO THE RRVC

### 4.1 GENERAL

- you must have with you a current certificate of competence to control the use of RRVs
- you must have knowledge of the lines over which the RRVs will travel and where the RRVs will:
  - go on or near the line
  - on-track
  - off-track
  - work
- you must be present when a RRV is:
  - about to go on or near the line
  - on-tracking
  - travelling
  - working
  - off-tracking



## 4.0 INSTRUCTIONS TO THE RRVC

- persons undertaking other roles can carry out the duties of the RRVC within a possession if competent to do so
- before allowing a RRV to start travelling or working, you must have a signed copy of the RRVOs pre-operation checklist
- you must tell the RRVO to work to your instructions only, and not to start work or make any rail mounted movement with the RRV unless told to do so by you
- if you hand over responsibility for control of a RRV to another RRVC you must inform:
  - the RRVO
  - the person responsible for protection arrangements at that location
- you may drive and operate a RRV only if you are competent to do so
- you must make sure the equipment needed to carry out emergency protection is readily available
- in OHLE areas you must establish that an isolation is in place before authorising any RRV to go on or near the line, on-track, off-track, work or travel
- a RRV must not make rail movements or work outside the limits of a possession

**Additionally on Iarnród Éireann Lines only the following instructions apply:**

- a RRV must not make rail movements or work beyond the limits of a T4 protection unless the movement is between:
  - a siding under T4 protection and an adjacent line under T3 possession
  - a line under T3 possession and an adjacent siding under T4 protection

## 4.0 INSTRUCTIONS TO THE RRV

- in which case you must come to a complete understanding with the PICOP or ES as appropriate, and the Person In Charge of the T4 protection, before the movement takes place

### 4.2 BEFORE GOING ON OR NEAR THE LINE

- a RRV may only be on-tracked at an agreed access point
- before a RRV goes on or near the line, you must make sure:
  - the RRV is certified to be used
  - the RRVO is competent to drive and operate the RRV
  - the line concerned is under possession as shown in Rule Book Section T Part 3 or protected as shown in Section T Part 4
  - any adjacent line that may be fouled or obstructed is protected as shown in Rule Book Section T Part 2, Section T Part 3 or Section T Part 4
  - you have received permission to on-track from the PICOP, ES or Person In Charge of the T4 protection
- if a RRV is to be on-tracked at a level crossing, you must:
  - comply with the local arrangements for the level crossing
  - make sure road users are not endangered
  - advise the Level Crossing Controller at a remotely controlled level crossing before fouling the crossing

## 4.0 INSTRUCTIONS TO THE RRVC

- if the barriers or gates cannot be closed to road traffic when on-tracking, you must make any additional arrangements necessary for the safety of road users

### 4.3 CONTROLLING MORE THAN ONE RRV (IARNRÓD ÉIREANN ONLY)

- you can control more than one RRV
- when accessing the line with more than one RRV, the PICOP or, if in a work site the ES or, if in a siding the Person In Charge of the T4 protection must be advised of the number of RRVs accessing the line
- where more than one RRV is to travel under the control of a single RRVC, you must inform each RRVO of the following:
  - how far the movement is to proceed
  - the conditions for the movement
  - where you will be controlling the movement from
  - the requirement to maintain a safe distance between RRVs in transit

### 4.4 LOADING WAGONS NEXT TO AN OPEN LINE

**NOTE:** This clause 4.4 applies only where authorised

- when using a RRV(s) to load wagons next to an open line and a train approaches on the open line, you must:
  - stop the work
  - make sure the RRVO grounds the load or rests it on the wagon being loaded

## 4.0 INSTRUCTIONS TO THE RRV

- you must arrange for enough warning to be given of approaching trains to allow the work to be stopped and any load to be grounded safely, before the train arrives

## 4.5 WORKING NEAR POINTS

- you must make sure all points are in the correct position for the safe movement of the RRV(s) over them

## 4.6 PASSING OVER LEVEL CROSSINGS – GENERAL

- the ES or PICOP will give you the specific instructions about what must be done at each level crossing
- you may tell the RRVO to pass over a level crossing only when permission has been given by the ES or PICOP as appropriate

## 4.7 PASSING OVER CCTV LEVEL CROSSINGS

- when it is necessary to pass over a CCTV level crossing, the PICOP (or ES if within a worksite) will tell you to approach the level crossing and stop the RRV(s) a minimum of 20 metres (20 yards) from the crossing
- when the RRV(s) has stopped a minimum of 20 metres (20 yards) from the crossing, you must instruct the RRVO(s) to remain stationary until instructed by you to proceed over the crossing
- where an Emergency Operator has been appointed, do not pass over the level crossing until authorised by the Emergency Operator

## 4.0 INSTRUCTIONS TO THE RRVC

- where an Emergency Operator has not been appointed, you must proceed on foot to the level crossing and using the yellow crossing telephone, contact the person controlling the crossing and request the barriers are lowered to allow the RRVC(s) to pass safely over
- you must advise the person controlling the crossing how many RRVCs will be passing over the level crossing
- when the barriers are fully lowered, you will be given permission for the RRVC(s) to pass over the crossing. you may then tell the RRVC(s) to pass over the level crossing and stop a safe distance beyond the crossing
- when the RRVC(s) have come to a stand beyond the level crossing, you must tell the person controlling the level crossing that the movement has been completed and it is safe to raise the barriers
- if you find that the level crossing phone is not working, you must contact the PICOP who will then make the necessary arrangements with the person controlling the level crossing for the safe movement of the RRVC(s) over the crossing

**Note: RRVC and RRVO may be the same person**

### 4.8 IF THE RRVC FAILS

- if the RRVC fails and has to be cleared from the line, it may be assisted by another suitable RRVC using a suitable tow bar or by a crane to a point within the possession where it can be safely off-tracked
- the movement must be made with extreme caution

## 4.0 INSTRUCTIONS TO THE RRV

### 4.9 IF THE RRV IS DERAILED

- if the RRV becomes derailed, you must immediately make sure that any line that is affected is protected as shown in Rule Book Section T Part 1
- you must tell the person responsible for that location (at that time) so that arrangements can be made for the rail to be examined at the point of derailment
- before attempting to re-rail you must first:
  - obtain permission to re-rail from the Responsible Manager
  - request the RRVO to examine the RRV and establish the fitness of the RRV to continue

**Note: Re-railing must not take place without you being present**

### 4.10 OFF-TRACKING RRV(s) WHEN WORK IS COMPLETED

- RRVs must only be off-tracked at a suitable location
- you must make sure that any other line that may be fouled by the RRV(s) is protected as shown in Rule Book Section T Part 2, Section T Part 3 or Section T Part 4 before off-tracking
- if the other line is also under possession, you must get the permission of the PICOP or ES as necessary, before the line is fouled
- if the RRV(s) is to be off-tracked at a level crossing, you must:
  - make sure road users are not endangered
  - at a remotely controlled level crossing, advise the person controlling the crossing before fouling the crossing

## 4.0 INSTRUCTIONS TO THE RRVC

- if the barriers or gates cannot be closed to road traffic when off-tracking, you must make any additional arrangements necessary for the safety of road users
- you must tell the PICOP or ES, or if in a siding the Person In Charge of the T4 protection as necessary, when the RRV(s) is clear of all lines

Not Used



# **PART TWO**

## **ON-TRACK MACHINES**

## 5.0 PRINCIPLES

### 5.1 OPERATION OF TRACK CIRCUITS

- On-Track Machines (OTMs) must not be relied on to operate track circuits unless fitted with an operational track circuit assister (TCA)
- movements of OTMs fitted with an operational TCA may run without restriction. all other OTMs are subject to special signalling arrangements

### 5.2 PROTECTION OF OTM

- except as shown in clause 7.3, OTMs must not work outside the limits of a possession
- protection must be provided on any other line or siding open to traffic which may be affected by the operation or working of the On-Track Machine (OTM)

## 6.0 GENERAL INSTRUCTIONS

### 6.1 TERMS USED IN THIS SECTION Q PART TWO

**TABLE Q2**

<b>TERM</b>	<b>MEANING</b>
On-Track Machine (OTM or OTMs)	A rail-mounted infrastructure maintenance vehicle permitted to operate, either self-propelled or in a train formation, within or outside a possession.
Operator In Charge	The competent person responsible for the control and operation of the machine. This will normally be a Driver.
Driver/Operator	A person competent to drive and operate an OTM within and outside a possession.
Operator	A person competent to operate (but not drive) an OTM.
Driver	A person competent to drive (but not operate) an OTM.

### 6.2 WHERE THIS SECTION APPLIES

- the instructions in this Section Q Part 2 apply to all OTMs as described in clause 6.1 above

### 6.3 PROTECTION

- the operator in charge of the OTM must make sure:
  - the possession arrangements are in place
  - any other line that may be affected is protected
  - emergency protection equipment is readily available

## 6.0 GENERAL INSTRUCTIONS

### 6.4 PERSONNEL REQUIREMENTS

- only a competent Driver is allowed to drive an OTM unless under the direct supervision of an authorised Driver
- only a competent Operator is allowed to operate an OTM unless under the direct supervision of an authorised Operator

### 6.5 INSPECTION CARS

- the instructions for OTMs also apply to Inspection Cars with the following exceptions:
  - the Inspection Car must be manned by a Driver/Operator and by a second person who must be competent in Guard duties
  - the Driver must undertake the duties shown for the Operator In Charge
  - the Inspection Car may stop on running lines open to traffic for inspection purposes as long as the Inspection Car is dealt with as 'a train required to stop in section'
  - if it is necessary to stop within the controls of a remotely controlled level crossing, the Operator In Charge must first make sure an Emergency Operator has taken local control of the crossing

## 7.0 INSTRUCTIONS TO THE OPERATOR IN CHARGE

### 7.1 GENERAL

- you must be competent to drive and operate the OTM concerned
- when driving, you must be accompanied by another person who is also competent to drive the OTM
- you and the person accompanying you must be present on the OTM during all movements, including when shunting or being assisted, or when coupled to another OTM
- unless fitted with an operational TCA, OTMs must not be relied on to operate track circuits and must not exceed 15mph over points

### 7.2 MOVEMENTS ON RUNNING LINES

- the following instructions apply in respect of OTMs not fitted with an operational TCA:
  - you must get the Signalman's permission before the OTM enters any running line open to traffic
  - you must do this before leaving a siding or line under possession
  - you must tell the signalman:
    - the movement is an OTM that cannot be relied on to operate track circuits
    - the amount of OTMs if more than one
    - the maximum permitted speed of the movement
  - you must then carry out the instructions given to you by the Signalman
  - you must not allow the OTM to pass over a level crossing without first ensuring it is safe to do so

## 7.0 INSTRUCTIONS TO THE OPERATOR IN CHARGE

### 7.3 WORKING ON RUNNING LINES

- OTMs carrying out the following functions only, are authorised to work on lines open to traffic:
  - Inspection Cars
  - Sandite Layers
  - Track Recorders
  - Water Jetters

### 7.4 MOVEMENTS IN POSSESSIONS

- you must proceed at such a speed that will allow you to stop the OTM within the distance you can see is clear, unless you are instructed to go at a slower speed
- you must not pass over any level crossing unless you have been given permission to do so and the crossing is clear and it is safe to proceed

### 7.5 WHEN STABLED

- when leaving the OTM unattended, you must:
  - apply the hand/parking brake
  - apply wheel scotches
  - carry out any specific instructions for the OTM concerned

# **PART THREE**

## **PLANT**

## 8.0 PRINCIPLES

### 8.1 PRINCIPLES

- Rule Book Section T Part 2, Section T Part 3 or Section T Part 4 protection must be in place on any line that may be fouled or obstructed by plant
- A Track Safety Co-ordinator (TSC) must have given permission for work to start, if the plant that will be used will foul any point within the area known as 'on or near the line'

## 9.0 GENERAL INSTRUCTIONS

### 9.1 TERMS USED IN THIS SECTION

TABLE Q3

TERM	MEANING
Plant	<p>Machines or equipment other than Road-Rail Vehicles in rail mode. For example: dump trucks, excavators or lifting equipment with rubber wheels or track layers, power generators and bulldozers.</p> <p>Does not include small or portable equipment which can be readily moved to a position of safety and equipment that will not form an obstruction.</p>
Plant Operator	A person competent to operate plant.

### 9.2 WHEN THIS SECTION APPLIES

- the instructions in this Section Q Part 3 must be applied to plant, whenever the plant will work within, or may foul any part of the area known as 'on or near the line'.



## 10.0 INSTRUCTIONS TO THE PLANT OPERATOR

### 10.1 GENERAL

- you must be competent to operate the item of plant concerned.
- you must not place the plant, or start work within, or foul the area known as 'on or near the line' unless you have been given permission to do so by the TSC, as shown in Rule Book Section B Part 1.

Not Used

# **SECTION R**

## **LOADING OR UNLOADING RAIL VEHICLES DURING ENGINEERING WORK**

Not Used

## 1.0 PRINCIPLES

### 1.1 NEED FOR PRECAUTIONS

- precautions must be taken to prevent anyone being endangered while loading or unloading Engineers materials on rail vehicles which may be moved

### 1.2 RESPONSIBILITY FOR PRECAUTIONS

- the Person in Charge of loading or unloading is responsible for taking these precautions

### 1.3 CONTROL OF MOVEMENTS

- the Person in Charge must control the movements of any vehicles to be loaded or unloaded and ensure that no-one is endangered by those movements

## 2.0 INSTRUCTIONS TO PERSONS IN CHARGE

### 2.1 CONTROL OF MOVEMENTS

#### 2.1.1 What you must do concerning taking charge of movements

- you must take charge of any movements to be made while vehicles are being loaded or unloaded
- you must first arrange with the Guard when you are to take control of movements
- similarly, you must tell the Guard when such movements are completed and control of any further movements is given back to the Guard
- the Guard will tell the Driver when you are taking and giving up control of movements

## 2.0 INSTRUCTIONS TO PERSONS IN CHARGE

### 2.1.2 When a movement is to be made

- you must warn anyone on or near the vehicles to be moved
- make sure they stop work and take up a safe position
- if there is any risk of being thrown over or falling off, they must not stay on the vehicles

### 2.1.3 How you must control movements

- you must control the movement by radio or by the normal handsignals applicable to shunting movements
- during darkness or poor visibility, the handsignals for moving away or moving towards must be given with a green handsignal
- when the movement is to be propelled, you must control the movement from the leading end and warn anyone on or near the line who may be endangered by it
- if it is not practicable for you to do this, you must arrange for a competent person to ride in the leading vehicle (if suitable) or walk alongside it and give any necessary warning

## 2.2 RESTRICTIONS ON UNLOADING

- you must not allow sleepers or rails to be unloaded from moving vehicles
- exceptionally, long welded rails may be unloaded from moving vehicles in which case you must ensure everyone is well clear when this takes place

## 2.3 DISCHARGING BALLAST

- ballast must not be discharged in darkness or poor visibility unless suitable lighting is in use

## 2.0 INSTRUCTIONS TO PERSONS IN CHARGE

- before work starts, you must check that the wagon platforms are clear of ballast, etc. and the safety rails are in place
- when the work is finished, you must ensure that the line is safe for the passage of trains before the normal working resumes

Not Used



# SECTION S

## PROTECTION AND WORKING OF HAND TROLLEYS AND RAIL-MOUNTED MAINTENANCE EQUIPMENT

Not Used

## 1.0 PRINCIPLES

**NOTE:** these instructions apply to all hand propelled equipment which may be pushed on one or both rails

### 1.1 NEED FOR PROTECTION

- protection must be provided on any line not under possession before a trolley is placed on the line
- except in an emergency, a trolley must not be placed on any line not under possession during darkness or poor visibility

### 1.2 RESPONSIBILITY FOR PROTECTION

- the Person in Charge of the trolley (PIC) is responsible for ensuring that protection is provided and removed correctly and safely so that trains are not endangered
- this person must be currently certificated as competent to act as a PIC (for the purposes of this Section S)
- the PIC and the Signaller are responsible for ensuring that, as far as possible, trains are not delayed

### 1.3 MEANS OF PROTECTION

- protection must be provided by maintaining a stop signal at Danger in rear of the portion of line over which the trolley will be moved and by appointing a Handsignaller
- this signal must be capable of being controlled to Danger from the signal box
- a Handsignaller is not, however, required if the PIC is in possession of the Token and the trolley will be placed on the line either:
  - within the single line section, or

## 1.0 PRINCIPLES

- within the protection of the home signal ahead of that single line section

### 1.4 PROTECTION OF RAIL-MOUNTED MAINTENANCE EQUIPMENT

- protection must be provided in accordance with this Section S for rail-mounted maintenance equipment with an off-tracking capability
- this applies to all such equipment as specified by the Engineer
- the operator of this equipment must be currently certificated as competent to act as a PIC (for the purposes of this Section S) or accompanied by such a person
- all references to trolley must be taken to include the equipment as described above so far as concerns protection arrangements, or movements arriving at signals or signal boxes, or movements over level crossings or in the wrong direction
- this equipment must not be relied on to operate track circuits

### 1.5 PROTECTION OF LIGHT MECHANICAL EQUIPMENT

- protection need not be provided for light mechanical equipment when placed on the line provided all the following conditions apply:
  - authority is given by the Engineer for its use without protection
  - it is being used in daylight and clear weather
  - there is sufficient view of approaching trains for it to be safely moved clear

## 1.0 PRINCIPLES

- the operator (and anyone else specially provided for the purpose) can readily remove it from the line
- there is sufficient space for it to be moved clear

## 2.0 INSTRUCTIONS TO PERSONS IN CHARGE

### 2.1 WHAT YOU MUST DO BEFORE THE TROLLEY IS PLACED ON THE LINE

#### 2.1.1 Summary of the arrangements you must make

- you must arrange for protection to be provided before the trolley is placed on any line not under possession
- you must first agree the arrangements with the Signaller as shown in clause 2.1.2
- you must then arrange protection as shown in clause 2.1.3 at the time agreed with the Signaller
- on completion of this, you must tell the Signaller who will enter the details of the arrangements in the Train Register as shown in clause 2.1.4
- the Signaller will read out these details which you must enter on a Protection Arrangements Form (see page S14)
- you must repeat the entries made on this form to the Signaller who will then give you an Authority Number
- you may then permit the trolley to be placed on the line

## 2.0 INSTRUCTIONS TO PERSONS IN CHARGE

### 2.1.2 What you must first agree with the Signaller

- your details (name, department and location)
- on which line the trolley will be placed
- between which locations it will be moved
- whether any wrong direction movement will be made
- the length of time needed for the trolley to be on the line
- the time when permission may be given for the trolley to be placed on the line
- the time it must be clear
- which signals will be maintained at Danger
- the location(s) where a Handsignaller (if required) will be positioned

### 2.1.3 How you must arrange protection

- position a Handsignaller at the signal(s) to be maintained at Danger to protect the trolley
- if a signal-telephone is not provided, position the Handsignaller, instead, in the signal box
- on a single or bi-directional line, position Handsignalmen as described above on both sides of the trolley

**NOTE:** a Handsignaller is not required where you are in possession of the Token as described in clause 1.3

## 2.0 INSTRUCTIONS TO PERSONS IN CHARGE

- on a line where Single Line Working applies, position Handsignalmen as described above in respect of trains approaching in the right direction
- additionally, position Handsignalmen as follows in respect of trains approaching in the wrong direction:
  - at the crossover, where trains enter the single line by means of a trailing crossover, or
  - at the protecting signal, where such trains use a facing crossover

### 2.1.4 How you must obtain an Authority Number

- after arranging signal protection and after receiving your advice that the necessary protection arrangements are complete, the Signaller is required to enter the details of the arrangements in the Train Register
- the Signaller will then read out these details which you must enter on a Protection Arrangements Form, Part A
- repeat to the Signaller your entry on this form
- provided the Signaller is satisfied this is correct, you will then be given an Authority Number which you must record on the Protection Arrangements Form, Part B

## 2.2 WHAT YOU MUST DO WHILE THE TROLLEY IS ON THE LINE

### 2.2.1 Safe working of the trolley

- do not allow the trolley to be overloaded or convey an insecure load

## 2.0 INSTRUCTIONS TO PERSONS IN CHARGE

- make sure there are at least two people with the trolley when moving and one of them is expressly in charge of the brake
- do not allow anyone to ride on the trolley
- ensure that a hand Danger signal is exhibited on the trolley and is clearly visible in the direction(s) from which trains normally approach

### 2.2.2 Arrival of the trolley at a signal or signal box

- you must tell the Signaller when the trolley arrives at any signal with a telephone or any signal box
- when the trolley arrives within the protection of a home signal, you may arrange for a Handsignaller to be appointed at that signal (or in the signal box if a signal-telephone is not provided) and a fresh Protection Arrangements Form to be completed, as shown in clause 2.1.4
- when you have done this, the Handsignaller at the signal or signal box in rear may be withdrawn and the original Protection Arrangements Form cancelled as shown in clause 2.3
- you must remind the Signaller of the presence of the trolley when stopped within the protection of the home signal if you are in possession of the Token (and Handsignalmen are not provided)
- do not allow the trolley to pass any signal at Danger unless authorised by the Signaller

### 2.2.3 Movements over level crossings

- you must not permit the trolley to pass over any manned level crossing unless it is closed to road traffic
- you must not permit the trolley to come within the controls of any automatic level crossing unless it is being locally operated



## 2.0 INSTRUCTIONS TO PERSONS IN CHARGE

### 2.2.4 Movements in the wrong direction

- the trolley may be moved in the wrong direction
- you must not, however, allow the trolley to:
  - pass over any unworked points unless secured, or
  - approach within 400 metres ( $\frac{1}{4}$  mile) of any signal being maintained at Danger to protect it

### 2.3 WHAT YOU MUST DO WHEN THE TROLLEY IS CLEAR OF THE LINE

- as soon as the trolley is clear of the line, tell each Handsignalman to withdraw their protection
- tell the Signalman when the trolley is clear and the protection withdrawn
- give your name, department, your location and the time and quote the Authority Number for the trolley which has been removed
- complete the Protection Arrangements Form (Part C)
- where protection of the trolley has been provided by obtaining the Token, you must return it to the Signalman (at whichever signal box is convenient)

### 2.4 WHAT YOU MUST DO WHEN USE OF THE TROLLEY IS FINISHED

- make sure it is placed well clear of any line
- its wheels must be secured by chain and padlock
- if possible, arrange for the wheels to be secured to a fixed structure

## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.1 WHAT YOU MUST DO BEFORE PERMITTING THE TROLLEY TO BE PLACED ON THE LINE

#### 3.1.1 What you must first agree with the PIC

- before you authorise a trolley to be placed on the line, you must agree the arrangements with the PIC
- these arrangements are described in clause 2.1.2
- you must also obtain the PIC's name, department and location

#### 3.1.2 How you must arrange signal protection

- at the time you have agreed with the PIC you must provide signal protection
- you must place or maintain at Danger the signal in rear of the portion of line on which the trolley is to be moved
- on a single or bi-directional line, you must do this on both sides of the portion of line concerned
- you must place in the proper position for the movement of the trolley any points within that portion of the line
- you must also place any points between the protecting signal(s) and that portion of line in the proper position to prevent any movement fouling or crossing the line protected by that signal
- use the necessary reminder appliances

## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.1.3 When you must make an entry in the Train Register

- before entering the details of the arrangements in the Train Register, you must:
  - complete the signal protection as described above
  - obtain the PIC's assurance that the necessary Handsignalmen are provided
- you must then make an entry in the Train Register as follows:
 

"As arranged with .....

(name/department/location of PIC),

Trolley authorised on .....line

between.....and .....

at ..... (time) under Rule Book, Section S

procedure"

"Signal/Release Nos .....

maintained at Danger/Normal"
- where the trolley is to be protected by the release of the Token, you must make a similar entry (in addition to any normally required) when handing over the Token to the PIC
- you must advise any other Signaller or Crossing Keeper affected by the arrangements
- if you are advised by another Signaller of any such arrangements, you must make an appropriate entry in the Train Register

## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.1.4 When you must issue an Authority Number

- you must read out the completed Train Register entry to enable the PIC to enter the same details on a Protection Arrangements Form (see page S14)
- ask the PIC to read this back to you
- provided you are sure this is correct, you must then give the PIC an Authority Number
- record this beneath the Train Register entry as follows:  

"Authority No. ....  
issued at ..... (time)"
- this Authority Number is the PIC's authority to place the trolley on the line

### 3.2 WHAT YOU MUST DO WHILE THE TROLLEY IS ON THE LINE

- you must maintain at Danger the signal(s) protecting the trolley
- you must not allow any movement to foul or cross the portion of line protected by that signal(s)
- you must not rely on the trolley to operate any track circuit

## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.3 WHAT YOU MUST DO WHEN THE TROLLEY IS CLEAR OF THE LINE

- the PIC will tell you when the trolley is clear of the line and when any Handsignalmen have been withdrawn
- you will also be given the PIC's name, department, location and the time together with the Authority Number for the trolley which has been removed
- you must make an entry in the Train Register as follows:

"Trolley clear of ..... line at ..... (hours)

Authority No ..... cancelled"

- where protection of the trolley has been provided by obtaining the Token, the PIC will return it to whichever signal box is more convenient; you must make and sign a note of the circumstances in the Train Register and, if necessary, give the other Signaller the cancelled Authority Number
- the signal(s) which has been maintained at Danger to protect the trolley may then be worked normally

## PROTECTION ARRANGEMENTS FORM

### - for a Hand Trolley

TO BE COMPLETED BY THE PIC AT THE SIGNALMAN'S DICTATION

#### PART A

##### ARRANGEMENTS

Name of PIC \_\_\_\_\_

Department of PIC \_\_\_\_\_

Location of PIC \_\_\_\_\_

Line affected \_\_\_\_\_

Locations between \_\_\_\_\_

which Trolley is to move \_\_\_\_\_ and \_\_\_\_\_

Signals / Releases to be kept \_\_\_\_\_

at Danger / Normal \_\_\_\_\_

#### PART B

##### AUTHORITY

	<b>1st Blockage</b>	<b>2nd Blockage</b>	<b>3rd Blockage</b>	<b>4th Blockage</b>
Authority No.	_____	_____	_____	_____
Signalman at	_____	_____	_____	_____
Time / Date	_____	_____	_____	_____

#### PART C

##### LINE CLEAR

Trolley clear of line:

	<b>1st Blockage</b>	<b>2nd Blockage</b>	<b>3rd Blockage</b>	<b>4th Blockage</b>
Authority No.	_____	_____	_____	_____
Time / Date Cancelled	_____	_____	_____	_____
Signature of PIC	_____	_____	_____	_____

# SECTION T

## ACCIDENTAL OBSTRUCTION OF THE LINE, PROTECTION OF ENGINEERING WORK AND ARRANGEMENTS FOR POSSESSIONS

**PART ONE: ACCIDENTAL OBSTRUCTION OF  
THE LINE**

**PART TWO: PROTECTION OF ENGINEERING  
WORK ON LINES NOT UNDER  
POSSESSION**

**PART THREE: ARRANGEMENTS FOR  
ABSOLUTE POSSESSIONS OF  
THE LINE**

**PART FOUR: PROTECTION OF ENGINEERING  
WORK IN SIDINGS**

Not Used



# **PART ONE**

## **ACCIDENTAL OBSTRUCTION OF THE LINE**

## 1.0 PRINCIPLES

### 1.1 NEED FOR PROTECTION

- protection must be provided IMMEDIATELY on any line open to movements on which it is no longer safe (or could become unsafe) for trains to pass

### 1.2 RESPONSIBILITY FOR PROTECTION

- when present, the Person in Charge must ensure that the arrangements for protection are carried out
- otherwise, anyone becoming aware that trains may be endangered must ensure these arrangements are carried out

### 1.3 MEANS OF PROTECTION

- where it is possible to contact the Signaller directly and quickly, this must be done using whatever means is available in order that EMERGENCY SIGNAL PROTECTION can be provided
- where this is not possible, or where the Signaller cannot provide effective Emergency Signal Protection, EMERGENCY DETONATOR PROTECTION must be provided

## 2.0 INSTRUCTIONS TO PERSONS ARRANGING FOR PROTECTION

### 2.1 WHAT YOU MUST DO IMMEDIATELY YOU BECOME AWARE THE LINE IS UNSAFE

- stay calm
- make sure you know exactly the location concerned
- check which line(s) is affected
- if in doubt, assume the line(s) is blocked

## 2.0 INSTRUCTIONS TO PERSONS ARRANGING FOR PROTECTION

- decide upon the quickest means to alert the Signalman
- if you have a track circuit operating device(s) readily available, place this on the line(s) concerned
- do this unless you know for certain the line(s) concerned is not track circuited

## 2.2 IF YOU CAN CONTACT THE SIGNALMAN DIRECTLY

- contact the Signalman without delay
- say what has happened
- give the best possible description of where the line(s) is blocked
- if the Signalman confirms that Emergency Signal Protection has been arranged and all approaching trains will be stopped, you need take no further action
- if possible, you should arrange for a hand Danger signal to be exhibited at the site of the obstruction
- if the Signalman tells you that Emergency Signal Protection cannot be arranged in time to prevent trains approaching, you must carry out Emergency Detonator Protection

## 2.3 IF YOU CANNOT CONTACT THE SIGNALMAN DIRECTLY AND QUICKLY

- carry out Emergency Detonator Protection immediately
- if you are able to contact the Signalman while carrying out Emergency Detonator Protection, do so and then observe the instructions in clause 2.2

## 2.0 INSTRUCTIONS TO PERSONS ARRANGING FOR PROTECTION

### 2.4 WHAT YOU MUST DO IF REQUIRED TO CARRY OUT EMERGENCY DETONATOR PROTECTION

- place three detonators on the line at least 2km (1¼ miles) from the obstruction in the direction(s) from which trains may approach
- if the distance falls in a tunnel, place the three detonators at the far end of the tunnel
- you must place three additional detonators on the line before reaching 2km (1¼ miles) if:
  - a train approaches
  - a tunnel entrance is reached
  - a diverging junction intervenes (see **Note 1** below)
  - a place is reached where direct contact with the Signaller is available for the first time (see **Note 2** below)

**NOTE 1: you must use discretion as to the order lines are protected**

**NOTE 2: if the Signaller confirms that Emergency Signal Protection has been arranged, Detonator Protection may be withdrawn**

- when placing three detonators, put them 20 metres (20 yards) apart on the same rail
- you must also show a hand Danger signal while carrying out Emergency Detonator Protection

## 2.0 INSTRUCTIONS TO PERSONS ARRANGING FOR PROTECTION

- you must remain at the protection point until told that:
  - signal protection has been provided, or
  - the obstruction has been removed

## 3.0 INSTRUCTIONS TO SIGNALMEN

### 3.1 WHAT YOU MUST DO IF TOLD THE LINE IS UNSAFE

- you must immediately provide Emergency Signal Protection by placing or maintaining the necessary signals at Danger and observing the relevant Train Signalling Regulations
- in addition, you must use the train-radio where possible to communicate with any train which may have passed the protecting signals
- provided adequate signal protection is being given, you may tell the person arranging protection that Emergency Detonator Protection is not required, or if such arrangements have already started, need not be continued

### 3.2 WHAT YOU MUST DO WHEN TOLD THE LINE IS NOW SAFE FOR TRAINS TO PASS

- you must ensure that this information is received from a responsible person
- you must ask this person to countersign your entry in the Train Register when normal working is to be resumed
- alternatively, you must obtain this person's name, grade and location and record this in the Train Register

Not Used

# **PART TWO**

## **PROTECTION OF ENGINEERING WORK ON LINES NOT UNDER POSSESSION**

## 4.0 PRINCIPLES

### 4.1 NEED FOR PROTECTION

- protection must be provided on any line not under possession before work starts which:
  - may endanger trains on that line, or
  - requires the setting up of a GREEN zone, as shown in Section B, clause 6.7

### 4.2 RESPONSIBILITY FOR PROTECTION

- the Person in Charge (PIC) is responsible for ensuring that protection is provided and removed correctly and safely so that trains or personnel are not endangered
- this person must be currently certificated as competent as a PIC (for the purposes of this Section T, Part 2)
- the PIC and the Signaller are responsible for ensuring that as far as possible, trains are not delayed

### 4.3 MEANS OF PROTECTION

- protection must be provided by maintaining a suitable stop signal at Danger in rear of the work and by appointing a Handsignaller
- this signal must be capable of being controlled to Danger from the signal box
- alternatively, protection must be provided by placing a track circuit operating device (T-COD) on the line at or on the approach to the site of work
- however, the use of a T-COD is permitted only if:
  - the PIC is competent in its use
  - the location concerned is approved for the use of T-CODs



## 4.0 PRINCIPLES

- the track circuit concerned shows CLEAR before the T-COD is placed on the line
- Single Line Working does not apply on the line concerned
- where a T-COD is to be used and the signal in rear of the site of work is capable of being controlled to Danger from the signal box, this must also be done by the Signaller
- as a second alternative, protection must be provided by disconnecting the signal(s) or signalling controls protecting the site of work
- however, this arrangement is permitted only if:
  - the PIC is certificated as competent to disconnect and restore the appropriate signalling controls, or
  - such a person is working directly to the PIC's instructions

### 4.4 WHEN PROTECTION MAY BE REMOVED

- protection must remain in place until the work is completed or stopped and it is safe for trains to pass
- if it is necessary and safe for trains to pass during the time of the work, the work must first be stopped and the protection then removed
- work must not then restart until the protection has been replaced
- if, however, protection is provided by use of a T-COD or by disconnection of signals or signalling controls, and it is essential to remove the T-COD or disconnection(s) for testing, etc, purposes before the work is completed or stopped, this may be done provided all of the following conditions apply:

## 4.0 PRINCIPLES

- the work does not endanger trains
- no equipment is in use other than light hand tools
- the PIC is acting as TSC for everyone protected by this arrangement
- the Signaller is told before work starts in order that a controlled signal in rear can be placed or maintained at Danger

## 5.0 INSTRUCTIONS TO PERSONS IN CHARGE

### 5.1 WHAT YOU MUST DO BEFORE PERMITTING WORK TO START

#### 5.1.1 Summary of the arrangements you must make

- you must arrange for protection to be provided before:
  - permitting work to start which may endanger trains, or
  - permitting a stationary obstruction to be placed on the line
- you must first agree the arrangements with the Signaller, as shown in clause 5.1.2
- you must then arrange the protection as shown in clause 5.1.3, 5.1.4 or 5.1.5 at the time agreed with the Signaller
- on completion of this, you must tell the Signaller, who will enter the details of the arrangements in the Train Register as shown in clause 5.1.6
- the Signaller will read out these details which you must enter on a Protection Arrangements Form (see page T22)
- you must repeat the entries made on this form to the Signaller who will then give you an Authority Number

## 5.0 INSTRUCTIONS TO PERSONS IN CHARGE

- you may then permit work to start

### 5.1.2 What you first must agree with the Signaller

- your details (name, department and location)
- the location of the work
- which line(s) will be affected
- the length of time needed for the work
- the time when permission may be given to start (or resume)
- the time by which it must be completed (or stopped)
- which signal(s) will be maintained at Danger
- whether Handsignalmen are to be appointed or a T-COD used or a signal(s) is to be disconnected
- whether it may be necessary to remove the T-COD or disconnection(s) before the work is completed or stopped

### 5.1.3 How you must arrange protection where Handsignalmen are to be appointed

#### In all Circumstances

- position a Handsignalman at the signal(s) to be maintained at Danger to protect the work
- if a signal-telephone is not provided, position the Handsignalman, instead, in the signal box

#### On a Single or Bi-directional line

- position Handsignalmen as described above on both sides of the work

## 5.0 INSTRUCTIONS TO PERSONS IN CHARGE

### On a line where Single Line Working applies

- position Handsignalmen as described above in respect of trains approaching in the right direction
- position Handsignalmen as follows in respect of trains approaching in the wrong direction:

at the crossover, where trains enter the single line by means of a trailing crossover, or

at the protecting signal, where such trains use a facing crossover

**NOTE:** you must appoint Handsignalmen for each line affected by the work

### 5.1.4 How you must arrange protection where a T-COD is to be used

- check that the use of a T-COD is permitted as shown in clause 4.3
- ascertain from the Signalman that the track circuit concerned shows CLEAR
- place the T-COD on the line at or on the approach to the site of work
- check with the Signalman that the track circuit concerned now shows OCCUPIED

### 5.1.5 How you must arrange protection where a signal(s) is to be disconnected

- check that the provisions of Section E (where relevant) have been observed

## 5.0 INSTRUCTIONS TO PERSONS IN CHARGE

- disconnect the signal(s) or signal route(s) protecting the site of the work

### 5.1.6 How you must obtain an Authority Number

- after arranging the necessary signal protection and after receiving your advice that the protection arrangements are complete, the Signaller is required to enter the details of the arrangements in the Train Register
- the Signaller will then read out these details which you must enter on a Protection Arrangements Form (Part A)
- repeat to the Signaller your entry on this form
- provided the Signaller is satisfied this is correct, you will then be given an Authority Number which you must record on the Protection Arrangements Form (Part B)
- if you have told the Signaller that it may be necessary to remove the T-COD or disconnection(s) before the work is completed or stopped, you must check that this Authority Number includes the prefix X (e.g. X5172)

## 5.2 WHAT YOU MUST DO DURING THE WORK

- keep in touch as necessary with the Signaller to ensure that trains are not delayed
- as far as practicable, ensure that a hand Danger signal is maintained on the ground, in the "five foot", at or on the approach to the site of work
- this must comprise a red flag during daylight when visibility is good and a red lamp at all other times
- it must be clearly visible in the direction(s) from which trains normally approach

## 5.0 INSTRUCTIONS TO PERSONS IN CHARGE

- if it is necessary to remove the T-COD or disconnection(s) for testing, etc, purposes, you must first tell the Signaller

**NOTE:** this is permitted only where you have obtained an Authority Number with the prefix X

### 5.3 WHAT YOU MUST DO WHEN WORK IS COMPLETED OR STOPPED

- when the work is completed or stopped and the line is safe for trains to pass, you must:
  - tell each Handsignaller to withdraw their protection, or
  - arrange for the T-COD to be removed unless already removed for testing, etc, purposes, or
  - reconnect the signalling controls which have been disconnected to protect the work unless already reconnected for testing, etc, purposes
- make sure you have first obtained an assurance that any crane or mechanical equipment which may foul the line is moved or secured well clear of the line
- tell the Signaller when this has been done
- give your name, department and your location and the time and quote the Authority Number for the protection which has been withdrawn
- complete the Protection Arrangements Form (Part C)

### 5.4 WHAT YOU MUST DO IF THE WORK IS TO RESUME

- you must again observe the instructions in clause 5.1 before allowing the work to resume

## 5.0 INSTRUCTIONS TO PERSONS IN CHARGE

- normally the Signaller will wait until the train has passed clear of the section before complying with these instructions
- where undue delay to the work may result from the length of the section concerned, you may arrange with the Signaller for these instructions to be observed as soon as the train has passed clear of the site of work
- in such circumstances you must:
  - remain alert for the passage of the train concerned
  - check that it is complete with tail lamps
  - immediately tell the Signaller when it has passed clear of the site of work
  - then observe the instructions in clause 5.1 before allowing work to resume

## 6.0 INSTRUCTIONS TO SIGNALMEN

### 6.1 WHAT YOU MUST DO BEFORE PERMITTING THE LINE TO BE OBSTRUCTED

#### 6.1.1 What you must first agree with the PIC

- before you authorise engineering work to start (or restart) on any line which is to be protected in accordance with this Section T, Part 2, you must agree the arrangements with the PIC
- these arrangements are described in clause 5.1.2
- you must also obtain the PIC's name, department and location

## 6.0 INSTRUCTIONS TO SIGNALMEN

### 6.1.2 What you must do when signal protection is required

- you must provide signal protection at the time agreed with the PIC
- you must place or maintain at Danger the signal in rear of the site of work
- on a single or bi-directional line, you must do this on both sides of the site of work
- use the necessary reminder appliances

### 6.1.3 What you must do when a T-COD is to be used

- check that the track circuit concerned is:
  - CLEAR before the T-COD is applied by the PIC
  - OCCUPIED when the T-COD is applied
- if the signal in rear of the site of work is capable of being controlled to Danger, you must place or maintain it at Danger, as shown in clause 6.1.2
- if, however, the PIC tells you that it may be necessary to remove the T-COD for testing, etc, purposes during the work, you **must** place or maintain at Danger the controlled signal in rear of the site of work

### 6.1.4 What you must do when a signal(s) is to be disconnected

- if possible, you must place or maintain the signal(s) at Danger before the disconnection is made
- if, however, the PIC tells you that it may be necessary to remove the disconnection(s) for testing, etc, purposes during the work, you **must** place or maintain at Danger the controlled signal in rear of the site of work



## 6.0 INSTRUCTIONS TO SIGNALMEN

### 6.1.5 When you must make an entry in the Train Register

- before entering the details of the arrangements in the Train Register, you must:
  - complete the signal protection as described above
  - obtain the PIC's assurance that the necessary Handsignalmen are provided
- you must then make an entry in the Train Register as follows:

"as arranged with .....

(name/department/location of PIC),

the ..... line

between .....

and ..... is blocked

under Rule Book, Section T, Part 2 procedure."

- you must endorse this entry:

"Signal/Release Nos.....

maintained at Danger/Normal"

unless a T-COD is in use and the signal in rear is not required to be controlled to Danger from the signal box

- you must advise any other Signaller or Crossing Keeper affected by the arrangements
- if you are advised by another Signaller of any such arrangements, you must make an appropriate entry in the Train Register

## 6.0 INSTRUCTIONS TO SIGNALMEN

### 6.1.6 When you must issue an Authority Number

- you must read out the completed Train Register entry to enable the PIC to enter the same details on a Protection Arrangements Form (see page T22)
- ask the PIC to read this back to you
- provided you are sure this is correct, you must then give the PIC an Authority Number
- record this beneath the Train Register entry as follows:

"Authority Number .....

issued at .....(time)"

- this Authority Number is the PIC's authority to start work
- this Authority Number must include the prefix X (e.g. X5172) if the PIC has arranged protection by T-COD or disconnection(s) which may need to be removed for testing, etc, purposes during the work

### 6.2 WHAT YOU MUST DO WHILE ANY LINE IS OBSTRUCTED

- you must maintain at Danger any signal(s) being used to protect the work
- you may, however, clear this signal for an unaffected route provided the site of work is well clear of the facing points and it is safe to do so
- if the PIC tells you that the T-COD or disconnection(s) is to be removed for testing, etc, purposes, you must continue to maintain the necessary signal protection

## 6.0 INSTRUCTIONS TO SIGNALMEN

### 6.3 WHAT YOU MUST DO WHEN THE WORK IS COMPLETED OR STOPPED

- the PIC will tell you when the work is completed or stopped, the protection arrangements have been withdrawn and it is safe for trains to pass
- you will also be given the PIC's name, department, location and the time together with the Authority Number for the protection which has been withdrawn
- you must make an entry in the Train Register as follows:

"Obstruction removed .....

line clear at ..... (hours)

Authority Number ..... cancelled"

- the signal(s) which has been maintained at Danger to protect the work may then be worked normally
- you must specially observe the operation of track circuits during the passage of the next train on the line concerned

### 6.4 WHAT YOU MUST DO IF THE WORK IS TO RESUME

- you must again observe the instructions in clause 6.1 before permitting the line to be obstructed again
- do this when either:
  - the train has passed clear of the section concerned, or
  - if undue delay to the work may result from the length of the section, you have obtained from the PIC an assurance that the train has passed clear of the site of work

## PROTECTION ARRANGEMENTS FORM

### - for Engineering Work

**TO BE COMPLETED BY THE PIC AT THE SIGNALMAN'S DICTATION**

#### **PART A**

##### **ARRANGEMENTS**

Name of PIC \_\_\_\_\_

Department of PIC \_\_\_\_\_

Location of PIC \_\_\_\_\_

Line affected \_\_\_\_\_

Locations of work/obstruction \_\_\_\_\_

Signals / Releases to be kept

at Danger / Normal \_\_\_\_\_

#### **PART B**

##### **AUTHORITY**

	<b>1st Blockage</b>	<b>2nd Blockage</b>	<b>3rd Blockage</b>	<b>4th Blockage</b>
Authority No.	_____	_____	_____	_____
Signalman at	_____	_____	_____	_____
Time / Date	_____	_____	_____	_____

#### **PART C**

##### **LINE CLEAR**

Work stopped / suspended or obstruction removed

	<b>1st Blockage</b>	<b>2nd Blockage</b>	<b>3rd Blockage</b>	<b>4th Blockage</b>
Authority No.	_____	_____	_____	_____
Time / Date Cancelled	_____	_____	_____	_____
Signature of PIC	_____	_____	_____	_____

# **PART THREE**

## **ARRANGEMENTS FOR ABSOLUTE POSSESSIONS OF THE LINE**

**Section T Part Three****Weekly Circular Amendment Record**

Any amendment to this Section T, Part Three issued via a Weekly Circular Notice will be recorded in the table below and displayed until the respective Rule Book pages are issued.

<b>WC No.</b>	<b>WE date</b>	<b>Description of Amendment</b>
3443	06.03.11	Removal of the requirement to name the picop. Amendment to clause 8.1 page T26.
3751	29.01.17	Addition: Checking of the Possession Plan Reference Number (PPRN). Amendment to clauses 9.3 and 11.1

## 7.0 PRINCIPLES

### 7.1 NEED FOR POSSESSIONS

- a possession of the line must be arranged when Engineer's trains or on-track machines are to be used and it is not practicable to regulate their movements in connection with the work by the normal signalling system
- a possession of the line may also be arranged where extensive engineering work is to take place, not involving Engineer's trains or machines, but where protection under Section T, Part 2 is not considered suitable

**NOTE:** these arrangements do not apply in sidings - see Section T, Part 4

### 7.2 RESPONSIBILITY FOR ARRANGING POSSESSIONS

- the Engineering Department requiring a possession must agree beforehand with the Operations Department the extent and duration of the possession and the location(s) of the work together with the arrangements for communications
- in an emergency, or in exceptional circumstances, these details (or changes to what has previously been agreed) must be agreed with the Operating Officer

### 7.3 PUBLICATION OF ARRANGEMENTS FOR POSSESSIONS

- details of the possession arrangements must be published in the Notice
- altered or additional arrangements to those shown in the Notice are permitted only in an emergency or in exceptional circumstances, and then only by agreement with the Operating Officer

## 7.0 PRINCIPLES

- where this does not involve disruption to the train service, the Operating Officer may authorise the Engineer to take possession of a single line where the Token is used to provide protection without the need for publication of the arrangements

## 7.4 ENSURING THE SAFETY OF MOVEMENTS WITHIN POSSESSIONS

- normal train signalling is suspended on any line blocked by a possession
- the possession must be protected by signals being maintained at Danger
- detonator protection must be provided at the limits of the possession (unless the Token is used to provide protection on a single line)
- only Engineer's trains are permitted to enter the possession
- all movements within the possession must be authorised by the person specified in this Section T, Part 3
- a train may cross the possession provided the arrangements have been agreed beforehand and notified to the Person In Charge of the Possession and the Signalman



## 8.0 GENERAL INSTRUCTIONS

### 8.1 APPOINTMENT OF PICOP

- the Engineering Department concerned must appoint a person in charge of the possession (PICOP)
- this person must be:
  - currently certificated as competent as a PICOP
  - familiar with the line and location concerned
  - fully aware of the possession arrangements
  - appointed primarily for this purpose and not have other duties unless agreed at the planning stage
- this appointment must be made at the planning stage and the name given to the Operating Officer (who must be told of any change to this)
- this Operating Officer must ensure that each Signalman involved is given the PICOP's name beforehand

### 8.2 APPOINTMENT OF ENGINEERING SUPERVISORS

- the Engineering Department concerned must appoint a person to be in charge of each work site under the possession
- this person is referred to as the ENGINEERING SUPERVISOR or ES
- this person must be currently certificated as competent as an ES
- the name of each ES must be given to the PICOP beforehand
- an ES may also act as PICOP subject to the requirements of clause 8.1

### **AMENDMENT TO THE RULE BOOK, SECTION T3**

With effect from 28th February 2011, the rule book requirement to publish the PICOP name in the Weekly Circular is rescinded. Section T3, Clause 8.1 of the Rule Book is therefore amended to read as follows:

#### **8.1 APPOINTMENT OF PICOP**

The Engineering Department concerned must appoint a person in charge of the possession (PICOP) this person must be:-

- currently certificated as competent as a PICOP
- familiar with the line and location concerned
- fully aware of the possession arrangements
- appointed primarily for this purpose and not have other duties unless agreed at the planning stage.

This appointment must be made at the planning stage.

**W.C. 3443**

**W.E. 06.03.11**

**Chief Safety & Security Officer 400/203**

## 8.0 GENERAL INSTRUCTIONS

### 8.3 LENGTH OF POSSESSIONS

- possessions should be kept to the shortest practicable length
- exceptionally, the limits of a possession may be moved but this must be agreed beforehand and detailed arrangements specified for each occasion
- in an emergency, this must be agreed by the Operating Officer

### 8.4 PROTECTION OF POSSESSIONS

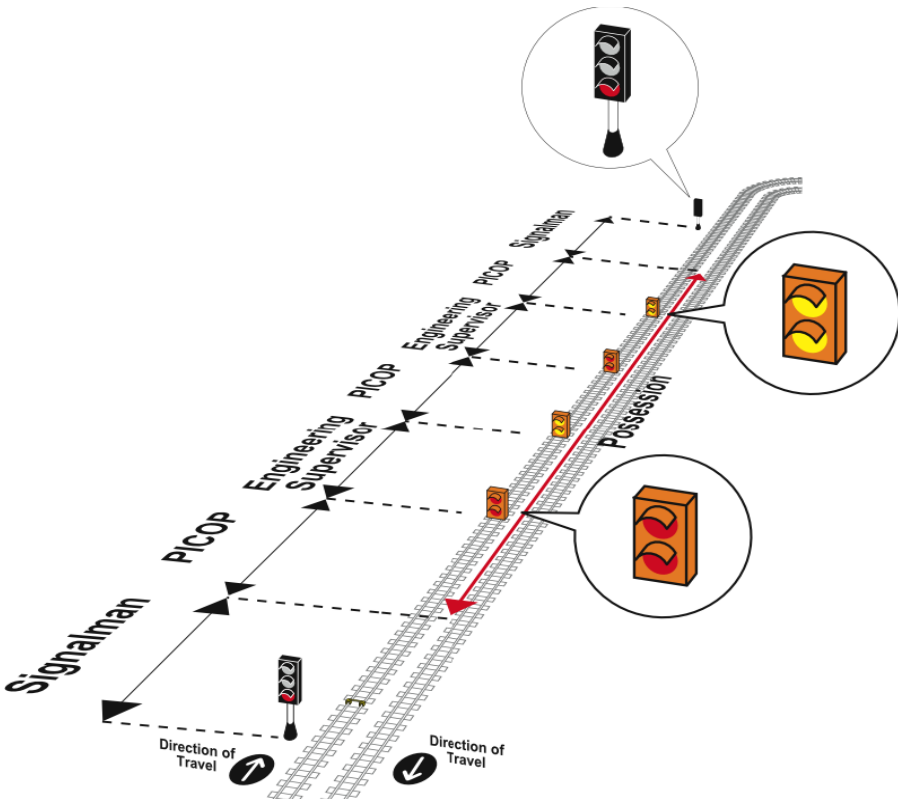
- protection must be provided by maintaining a stop signal at Danger in rear of the portion of line on which the possession will be taken
- this signal must be capable of being controlled to Danger from the signal box
- detonator protection must be provided at:
  - each end of the possession
  - any line joining the possession at a junction
- detonator protection is not needed at crossovers, loops or sidings joining the line under possession, but these points (whether worked from a signal box or ground frame) must be kept in the proper position for the possession except when:
  - an Engineer's train is to enter or leave the possession at an intermediate siding, or
  - a train is to cross the possession
- detonator protection is not needed if the PICOP obtains the Token to protect the possession of a single line
- detonator protection must comprise:

## 8.0 GENERAL INSTRUCTIONS

- three detonators, 20 metres (20 yards) apart
  - a red banner flag in daylight and clear weather
  - a red light (showing along the line in both directions) at all other times
- in certain circumstances, the PICOP must arrange for a Handsignalman to be positioned at the detonator protection

## 8.5 INDICATION OF WORK SITES

- the limits of each work site in the possession must be indicated by a marker board



## 8.0 GENERAL INSTRUCTIONS

**EXCEPTION:**     **marker boards are not required in possessions where no movement will take place**

- marker boards are double sided
- two flashing red lights, vertically displayed, means:
  - ENTRANCE to work site area
  - not to be passed without authority from the ES
- two flashing yellow lights, vertically displayed, means:
  - EXIT from work site area
  - not to be passed without authority from the PICOP
- marker boards must be placed as follows:
  - in the "five foot" of the line concerned
  - with the red lights facing movements approaching the work site
  - at least 100 metres (100 yards) from the work site, at each end
- if the protecting detonators fall within that distance, the marker board must be placed at the detonators
- if marker boards for adjacent work sites would be closer to each other than 100 metres (100 yards) only one pair of marker boards must be provided to protect both work sites

## 8.0 GENERAL INSTRUCTIONS

### 8.6 COMMUNICATIONS WITHIN POSSESSIONS

- in the interests of safety as well as efficiency, it is essential that communication is readily available between the PICOP and the following persons:
  - Signalmen
  - Engineering Supervisors
  - Handsignalmen (where provided)
  - persons at protecting detonators
  - other persons, as necessary, such as Crossing Keepers, Emergency Operators at automatic level crossings, etc
- the arrangements for communications must be agreed at the pre-planning meeting
- any additional equipment or facilities needed must be arranged

### 8.7 MOVEMENTS WITHIN POSSESSIONS

- movements within or entering a work site must be authorised by the ES
- where two closely adjacent work sites are indicated by only one pair of marker boards, one ES (as arranged with the PICOP) must authorise all movements within or entering the combined work site
- all other movements within or entering a possession must be authorised by the PICOP
- when safe and practicable, on-track machines should be coupled to one another or trains coupled together to reduce the number of movements outside work sites



Reference No.	RB/S1/Section T
Version	1.0
Status	Live
Prepared by	Rule Book Executive
Checked by	Procedures Manager
Approved by	Head of IM Safety

# **IARNRÓD ÉIREANN SUPPLEMENT TO THE RULE BOOK DECEMBER 2014**

**(Supplement No.1)**

**APPLICABLE ON IARNRÓD ÉIREANN  
LINES ONLY**

**This page is  
not used**



## **ABOUT THIS SUPPLEMENT**

- This supplement applies from Monday 1<sup>st</sup> December 2014 until further notice
- The supplement is applicable on Iarnród Éireann lines only
- The supplement is issued to all railway personnel operating over Iarnród Éireann lines with the exception of Translink Northern Ireland staff who will not receive the supplement
- A number of pages within Section T Part 3 are amended, consequently pages T31 through to T62 of Section T Part 3 are reissued. Section T Part 4 is also reissued in this supplement, but is unchanged
- The pages must be inserted in to your Rule Book and the existing pages retained, until further notice, at the back of your Rule Book
- Each new item on the replacement pages is indicated by a vertical black line in the margin

## **EXPLANATION NOTE**

This supplement is issued in order to clarify a number of absolute possession related rules. It is important to note, that in practical application the rules have not changed

The clarified items in this supplement address the following:

- Protection arrangements on single and bi-directional lines
- Conditions when a Handsignalman is required
- Clearance of a protecting signal for an unaffected route

### **LIST OF REVISIONS**

- **9.4.2**, clause reissued in full
- **9.4.3**, new clause inserted detailing circumstances when a handsignalman must be appointed
- **9.4.4**, clause renumbered formerly clause 9.4.3
- **9.5.1**, bullet point 1, page reference to Possession Arrangements Form amended
- **9.5.4**, bullet point 3, page reference to Engineering Supervisors Certificate amended
- **9.6.2**, bullet point 3, reference to clause 9.4.2 amended to read 9.4.3
- **9.7.3**, bullet point 2, reference to clause 9.4.3 amended to read 9.4.4
- **10.3**, bullet point 1, sub bullet 2, page reference to Engineering Supervisors Certificate (Part A) amended
- **11.2.1**, bullet point 2, new sub bullet added

**RULE BOOK SECTION T PART 3, CLAUSE 9.3.**

**ADDITION TO PICOP'S INSTRUCTIONS**

All concerned please note, with regard to the 'mandatory use of possession map process' as published within this Weekly Circular, Rule Book Section T Part 3, Clause 9.3 is amended and now reads as follows:

**9.3 WHAT YOU MUST DO BEFORE TAKING THE POSSESSION**

- check the details of the possession to be taken with the Signaller controlling the signal(s) leading to the line to be blocked, including:
  - o the Possession Plan Reference Number (PPRN) detailed on the possession map
- agree with the Signaller the time when the arrangements for taking the possession may start
- make sure that any additional equipment or facilities needed for communication within the possession are available

Accordingly please strike through the existing Section T Part 3, Clause 9.3 and endorse 'amended' and retain this notice at page T31 of the IÉ Rule Book.

W.C. 3751

W.E. 29.01.17

**Head of Safety IÉ Infrastructure 400/8/T/01**

## 9.0 INSTRUCTIONS TO PICOPS

### 9.1 YOUR RESPONSIBILITIES

- to ensure that the necessary protection is provided for the possession
- to authorise movements entering or within the possession to ensure their safety
- to ensure the possession is given up properly so that normal working is safely resumed

### 9.2 HOW YOU ARE IDENTIFIED AS PICOP

- wear on your left arm a green armband with "PICOP" in red letters
- when speaking to anyone by telephone or radio, make sure they understand that you are the PICOP

### 9.3 WHAT YOU MUST DO BEFORE TAKING THE POSSESSION

- check the details of the possession to be taken with the Signaller controlling the signal(s) leading to the line to be blocked
- agree with the Signaller the time when the arrangements for taking the possession may start
- make sure that any additional equipment or facilities needed for communication within the possession are available

## 9.0 INSTRUCTIONS TO PICOPS

### 9.4 WHAT YOU MUST DO WHEN TAKING THE POSSESSION

#### 9.4.1 Checking that the signal protection is provided

- at the time you have agreed with the Signaller for the start, you must ascertain that the necessary signal protection is provided and reminder appliances are in use

#### 9.4.2 Arranging for detonator protection to be provided

- after signal protection has been arranged, you must ensure that detonator protection is provided as follows:
- **on a double line**

**IN REAR OF THE POSSESSION:** to be placed 400 metres (1/4 mile) ahead of the stop signal in rear to be maintained at Danger

- where there are points or crossings between that signal(s) and the possession, the detonators must be placed 400 metres (1/4 mile) ahead of those points or crossings
- **AHEAD OF THE POSSESSION** to be placed 400 metres (1/4 mile) on the approach to the stop signal ahead of the possession
- where there are TRAILING points or crossings between that signal and the possession, the detonators must be placed 400 metres (1/4 mile) on the approach to those trailing points or crossings

## 9.0 INSTRUCTIONS TO PICOPS

- **on a single or bi-directional line**
  - you must arrange for protection to be provided at **each end** of the possession as shown below
  - **IN REAR OF THE POSSESSION:** to be placed 400 metres (1/4 mile) ahead of the stop signal in rear to be maintained at Danger
  - where there are points or crossings between that signal(s) and the possession, the detonators must be placed 400 metres (1/4 mile) ahead of those points or crossings
- if it is not possible to achieve a minimum distance of 400 metres between the protecting signals and the detonators place the detonators as close as possible to this distance (and advise the Signaller accordingly)
- in all circumstances you must obtain an assurance (directly or via the Signaller) that each person required to place protection has done so.
- advise the Signaller when all necessary detonator protection is in place
- if Single Line Working applies, you must supplement the protection provided as necessary
- if you are in possession of the Token for the section of line over which the possession is to be taken, detonator protection is not required.
- when a possession is taken up to a buffer stop detonator protection is not required at the buffer stop

9.0 INSTRUCTIONS TO PICOPS

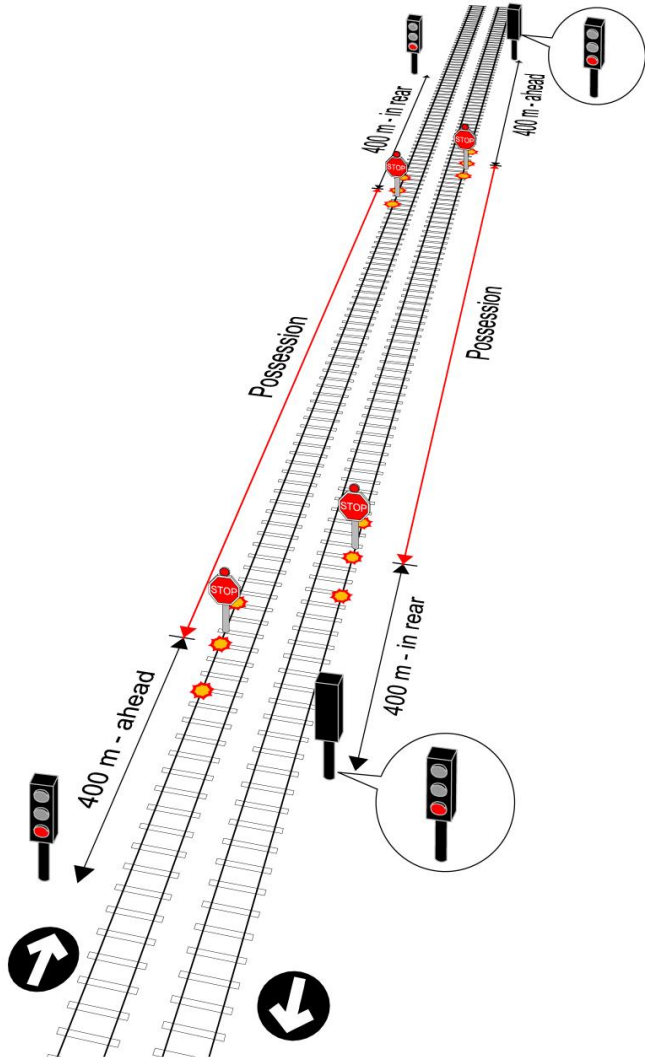


Diagram showing standard protection arrangements on each line of a double line layout

9.0 INSTRUCTIONS TO PICOPS

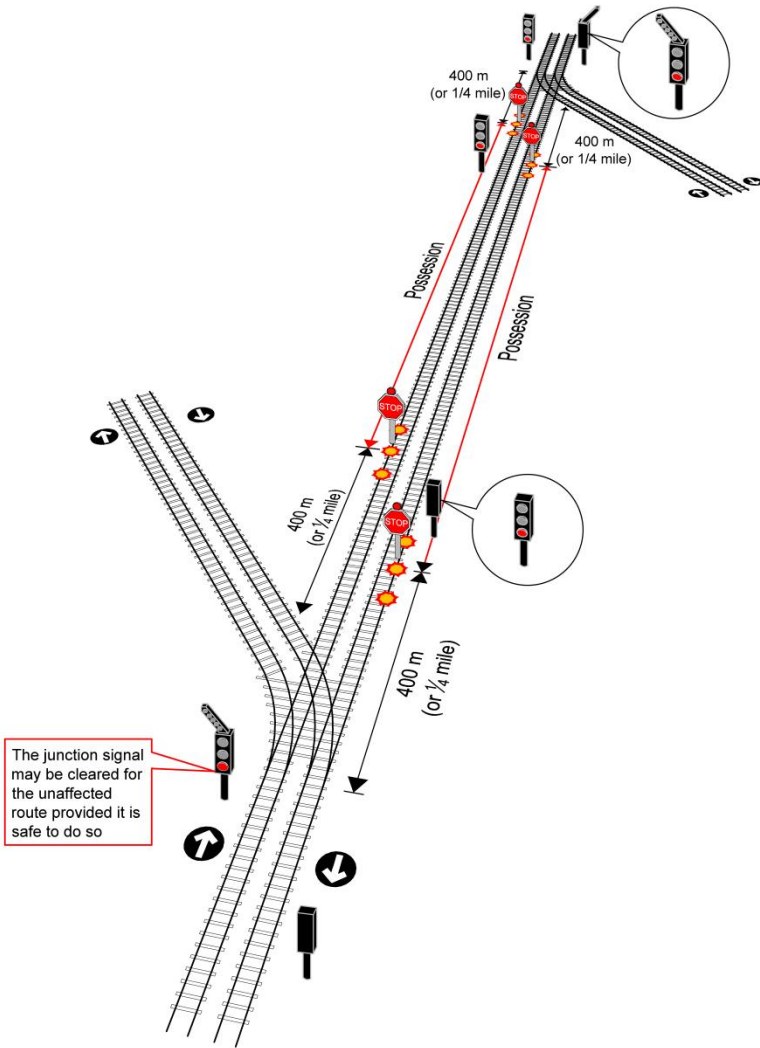


Diagram showing the protection distance extended when there are points or crossings falling within 400 metres of the protecting signals



9.0 INSTRUCTIONS TO PICOPS

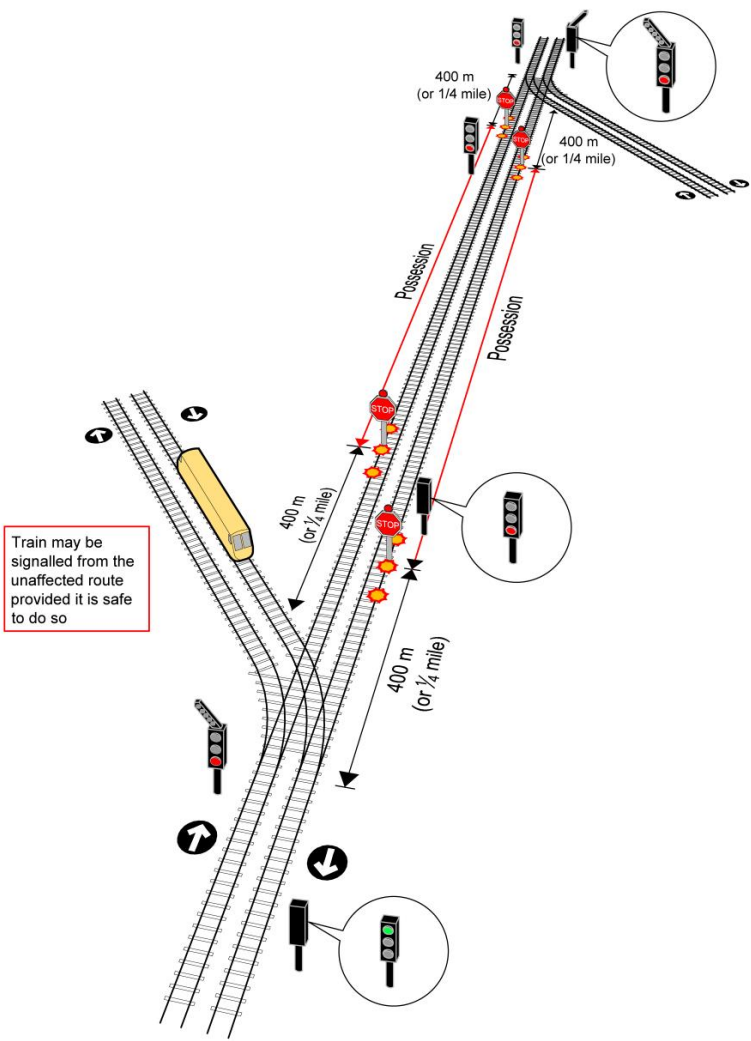


Diagram showing a train signalled from an unaffected route across points located between the protecting signals and the possession

9.0 INSTRUCTIONS TO PICOPS

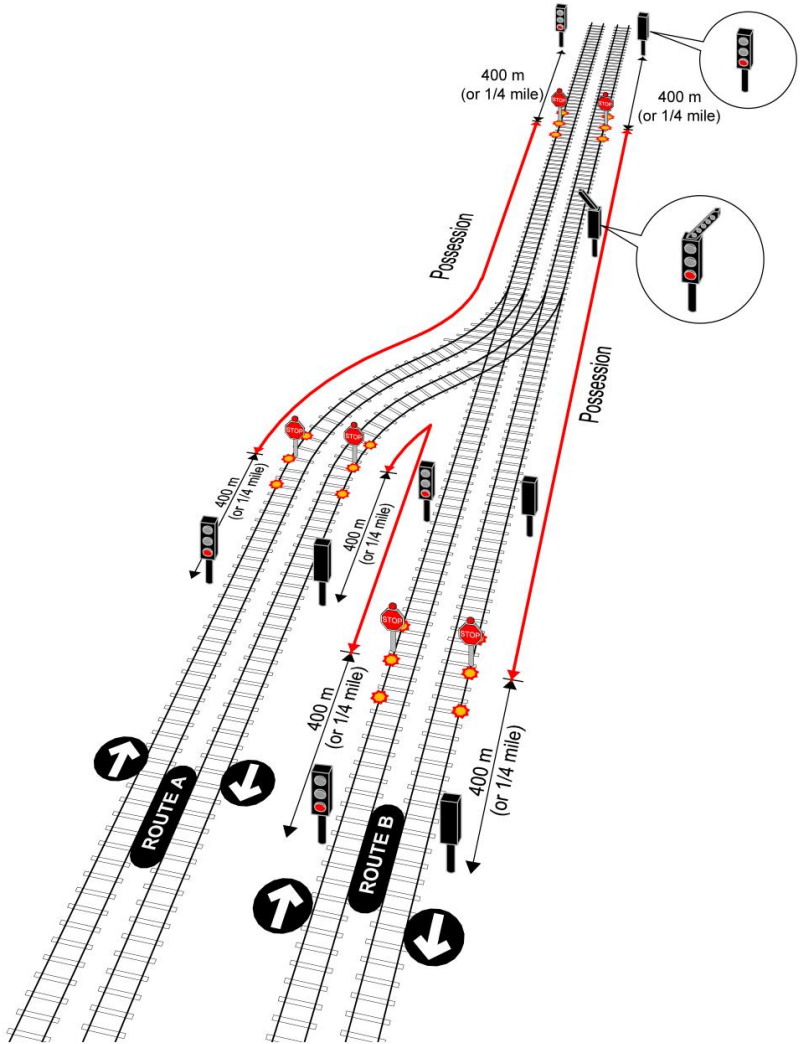


Diagram showing protection arrangement for lines joining a possession

# 9.0 INSTRUCTIONS TO PICOPS

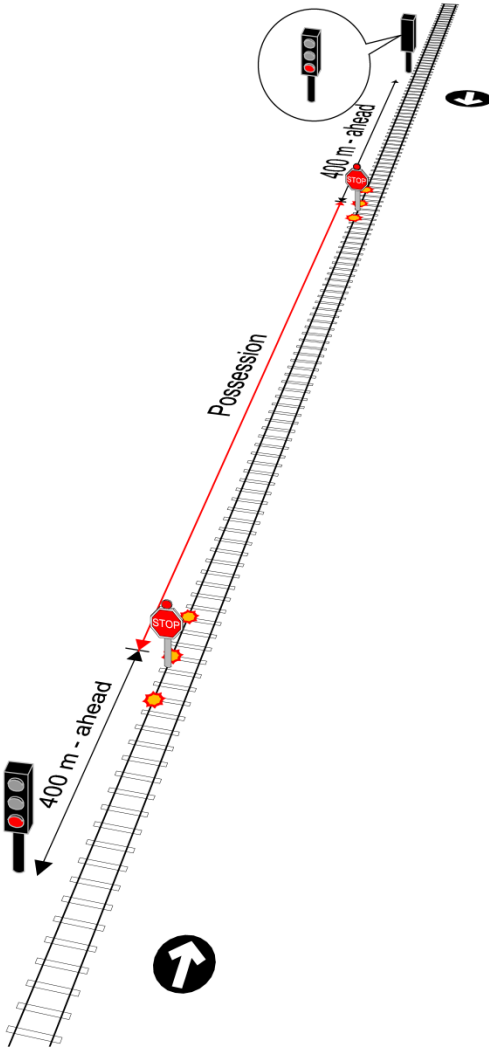


Diagram showing standard protection arrangement on a single line

9.0 INSTRUCTIONS TO PICOPS

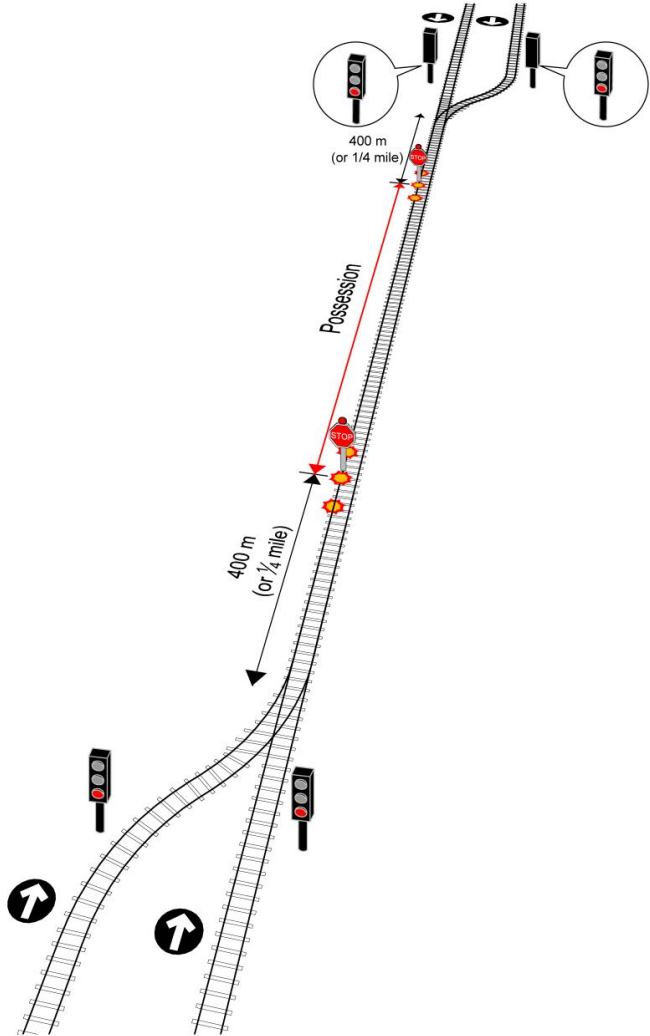


Diagram showing the protection distance extended when there are points or crossings falling within 400 metres of the protecting signal(s) on a single line

## 9.0 INSTRUCTIONS TO PICOPS

### 9.4.3 When a Handsignalman must be appointed

- you must appoint a Handsignalman if all of the following circumstances apply
  - it is not possible to achieve a minimum distance of 400 metres between the protecting signals and the detonators
  - there are points or crossings as described above in clause 9.4.2 between the signal and the possession
  - trains are to be worked over those points or crossings
  - movements are to take place within the possession
- you must advise the signalman that you have appointed a Handsignalman/men and at which end(s) of the possession he is positioned.

### 9.4.4 When you must sign the Train Register

- after arranging the necessary signal protection and after receiving your advice that the protection arrangements are complete, the Signalman is required to enter the details of the arrangements in the Train Register
- you must countersign this entry
- alternatively, where it is not practicable to go to the signal box because of the distance involved, you must ask the Signalman to read out the entry
- provided you are sure it is correct, you must then give your name, place from where you are speaking and the time
- the Signalman will enter these details in the Train Register on your behalf

## 9.0 INSTRUCTIONS TO PICOPS

- you must also countersign the entry the Signaller is required to make when handing over a Token for protection purposes

## 9.5 WHAT YOU MUST DO DURING THE POSSESSION

### 9.5.1 How you must record the arrangements

- use a Possession Arrangements Form (see pages T59, T60)
- use Part A of this form to record details of the protection arrangements and the arrangements made for the operation of level crossings
- use Part B of this form to record the time you authorise work to start at each work site and the time it is finished

### 9.5.2 When you have obtained the Token

- you must keep the Token in your possession until the possession is given up

### 9.5.3 What you must do where points are required to be secured

- you must arrange the securing of any unworked points where facing movements will be made in the possession

### 9.5.4 What you must do when authorising work to start at a work site

- you must not permit such work to start before the possession is granted
- you must also make sure that any movement you have authorised which may be affected by the work site has either passed clear or is completed
- when authorising the ES to start work, you must complete Part A of an Engineering Supervisor's Certificate (see pages T61, T62) and give this to the ES

## 9.0 INSTRUCTIONS TO PICOPS

- alternatively, you must instruct the ES to complete Part A of the Certificate at your dictation
- you must use Part B of your Possession Arrangements Form to record when each ES is authorised to start work

### 9.5.5 What you must do when relieved or relieving

- make sure your relief fully understands the arrangements for the possession
- sign Part C of your Possession Arrangements Form and hand it to your relief, together with your record of movements
- give the location of any train, vehicles or on-track machines in the possession and details of any movements taking place
- tell the Signaller at the signal box where the possession was granted and give the name of the new PICOP
- if that signal box has closed, tell the new PICOP to inform the Signaller there as soon as it re-opens
- if relieving, you must sign Part C of the form (new PICOP) which is handed to you

### 9.5.6 What you must do when an ES is relieved

- note the name of the new ES on your Possession Arrangements Form (Part B)

### 9.5.7 What you must do when a signal box closes

- a signal box need not remain open during the possession if movements will not enter or leave the possession at that end
- the Signaller will tell you when the signal box is to close and when it has reopened

## 9.0 INSTRUCTIONS TO PICOPS

- if you come on duty while it is closed, you must point out the change of PICOP as soon as it reopens

### 9.5.8 What you must do when a train crosses a possession

- before a crossing movement takes place you must:
  - ensure that the previous movement on the section of line under your control has arrived complete at the end of the section
  - ensure that Detonator Protection is then provided in both directions on the line under possession to protect the crossing movement
  - tell the Signaller when it is safe for the crossing movement to be made
- you must not then authorise any further movement on that section of line under your control towards the location where the crossing movement takes place until:
  - the Signaller confirms that the crossing movement has passed clear and the points are restored to the proper position for the possession
  - you have then arranged for the Detonator Protection to be removed

**NOTE: these arrangements are not permitted within the limits of a work site**

- you must record the times at which:
  - you authorise the Signaller to allow the movement to cross the possession
  - you ascertain that it has passed clear
- these times must be included in the record required in accordance with clause 9.6



## 9.0 INSTRUCTIONS TO PICOPS

### 9.6 ARRANGEMENTS YOU MUST MAKE WHEN AUTHORISING MOVEMENTS

#### 9.6.1 Movements towards the possession

- the Signaller will obtain your permission before authorising any of the following movements:
  - towards the protecting detonators at either end, or
  - towards the protecting signal at either end where you have the Token for the single line section, or
  - entering the possession at points at an intermediate location
- you are responsible for authorising any movement beyond the detonators, signal or points described above
- after the movement has passed clear of the detonators, signal or points, you must arrange for the Signaller to be told and any protection replaced

#### 9.6.2 Movements within the possession

- movements within a work site or required to enter a work site will be authorised by the ES concerned
- you are responsible for authorising all other movements
- where it has been necessary to appoint a Handsignaller at the protecting detonators (as shown in clause 9.4.3), you must not authorise a movement towards the detonators at that end(s) of the possession without first obtaining the Signaller's permission
- you must tell the Signaller as soon as any movement for which permission has been obtained is completed or has passed clear

## 9.0 INSTRUCTIONS TO PICOPS

- if a marker board for a work site is positioned at the detonators where a Handsignalman is appointed, you must:
  - tell the ES concerned to obtain your permission before authorising a movement within the work site towards the marker boards/detonators and tell you when it is completed
  - make the necessary arrangements with the Signalman (as described above)

### 9.6.3 Movements required to leave the possession

- the Signalman will authorise such movements
- you must tell the Signalman when any such movement is required
- make sure any protection is replaced as soon as the movement has passed clear

### 9.6.4 General Instructions when authorising movements

- when instructing the Driver or Guard, make sure a clear understanding is reached as to:
  - what is required
  - how far the movement is to proceed
- give a reminder that the movement must:
  - be made cautiously
  - not pass over any level crossing without first ensuring it is safe to do so
  - not pass over unworked points in the facing direction unless they are secured

## 9.0 INSTRUCTIONS TO PICOPS

- whenever practicable, give these instructions, etc, personally to the Driver or Guard
- otherwise, this must be done only by a competent person on your behalf
- you must record the time and details of each movement you authorise
- this record must be kept with your Possession Arrangements Form

## 9.7 WHAT YOU MUST DO WHEN THE POSSESSION IS NO LONGER REQUIRED

### 9.7.1 Before the possession is given up

- you must ensure it is safe for the possession to be given up
- each ES is required to assure you when:
  - the portion of line concerned is clear and safe for trains to pass
  - all marker boards have been removed
  - anyone remaining on or near the line is aware that traffic working may be resumed
- you must receive a completed and signed Engineering Supervisor's Certificate from the ES at each work site within the possession
- alternatively, you must receive an assurance from the ES concerned that the Certificate has been completed and signed
- you must then contact the Signaller at the signal box where the possession was obtained

## 9.0 INSTRUCTIONS TO PICOPS

- tell the Signaller you are ready to give up the possession
- you must then complete Part D of your Possession Arrangements Form

### 9.7.2 When you must withdraw protection

- when the Signaller is aware that the possession is to be given up, you must arrange for the protection to be withdrawn
- tell the person(s) withdrawing protection to confirm (directly or via the Signaller) when they have done so
- if Single Line Working applies, leave the protection in place and advise the Pilotman of the circumstances
- make sure that any points secured for the possession are released
- tell the Signaller when:
  - protection has been withdrawn
  - the line is clear and safe to run on

### 9.7.3 When you must sign the Train Register

- you must countersign the Signaller's entry in the Train Register indicating that the line is clear and safe to run on
- alternatively, as shown in clause 9.4.4, ask the Signaller to read out the entry and give the information shown in that clause which the Signaller will enter in the Train Register
- where possession of a single line has been taken by obtaining the Token, you must return it to the Signaller (at whichever signal box is convenient) and countersign the entry in the Train Register

## 10.0 INSTRUCTIONS TO ENGINEERING SUPERVISORS (ES)

### 10.1 YOUR RESPONSIBILITIES

- to ensure that the necessary marker boards are provided to indicate the limits of your work site
- to authorise movements entering or within your work site to ensure their safety
- to ensure the work site is cleared when work is finished so that the possession may be safely given up

### 10.2 HOW YOU ARE IDENTIFIED AS ES

- wear on your left arm a blue armband with "ENGINEERING SUPERVISOR" in black letters

**EXCEPTION:** where two closely adjacent work sites are indicated by only one pair of marker boards, only the ES nominated by the PICOP to control movements at the combined work site must wear this armband

- when speaking to anyone by telephone or radio, make sure they understand that you are the Engineering Supervisor in charge of the work site concerned

### 10.3 WHAT YOU MUST DO BEFORE PERMITTING WORK TO START

- before permitting work to start at your work site, you must complete the following arrangements:
  - first, you must obtain the PICOP's permission
  - you must record the details of this authority on your Engineering Supervisor's Certificate (Part A), (see page T61)

## 10.0 INSTRUCTIONS TO ENGINEERING SUPERVISORS (ES)

- you must then, where required, ensure that a marker board is correctly positioned in the "five foot" on each side of your work site (on each line affected)
- you must tell the PICOP when and where each marker board is positioned
- you must specifically point out to the PICOP if it is necessary to position a marker board at the detonators protecting the possession

### 10.4 WHAT YOU MUST DO DURING THE WORK

#### 10.4.1 If a Track Safety Co-ordinator requires to work at your work site

- the TSC of a group required to work at your work site may need to rely upon the presence of the work site when arranging lookout protection
- before doing so, the TSC is required to sign your Certificate (Part E)
- you must not then give up your work site until each TSC (or relieving TSC) has again signed your Certificate to the effect that the work is completed or everyone is clear

**NOTE: if you are also acting as TSC for your group, you must complete Part C of your Certificate**

#### 10.4.2 What you must do when relieved or relieving

- make sure your relief fully understands the arrangements at your work site
- hand over your Certificate

## 10.0 INSTRUCTIONS TO ENGINEERING SUPERVISORS (ES)

- give the location of any train, vehicles or on-track machines at the work site and details of any movements taking place
- tell the PICOP and give the name of the new ES
- if relieving, you must sign Part B of the Certificate (new ES) which is handed to you

## 10.5 ARRANGEMENTS YOU MUST MAKE WHEN AUTHORISING MOVEMENTS

- you are responsible for authorising each movement within your work site, or required to enter your work site
- the PICOP is responsible for authorising any movement required to leave your work site
- you must ensure that any movement made at your work site is controlled properly to ensure its safety
- make sure that the Driver or Guard understands what is required
- give a reminder that the movement must be made cautiously and must not pass over any level crossing or unworked points unless safe to do so
- if a marker board is positioned AT the protecting detonators for the possession where the PICOP has told you a Handsignalman is provided, you must:
  - obtain the PICOP's permission before authorising a movement towards the marker board/detonators
  - tell the PICOP when it is completed

## 10.0 INSTRUCTIONS TO ENGINEERING SUPERVISORS (ES)

### 10.6 WHAT YOU MUST DO WHEN WORK IS COMPLETED

- the following arrangements must be made when:
  - each TSC has signed your Certificate (Part E) to the effect that work is completed, or continuing but no longer relies on the possession arrangements
  - all work necessitating the stoppage of trains is completed
  - all trains or on-track machines have left the work site
- you must check that the portion of line affected by the work is now clear and safe for trains to pass
- you must tell anyone remaining on or near the line that traffic working may be resumed
- you must arrange for any marker boards to be removed
- when these arrangements have been completed, you must complete and sign Part D of your Certificate
- you must hand this to the PICOP
- alternatively, you must verbally give the assurances in this portion of the Certificate that you have done this
- you must forward the Certificate to the PICOP as soon as possible



**RULE BOOK SECTION T PART 3, CLAUSE 11.1,**  
**ADDITION TO SIGNALMAN'S INSTRUCTIONS**

All concerned please note, with regard to the 'mandatory use of possession map process' as published within this Weekly Circular, Rule Book Section T Part 3, Clause 11.1 is amended and now reads as follows:

**11.1 WHAT YOU MUST DO BEFORE ARRANGING THE POSSESSION**

- check the details of the possession with the person to act as PICOP including:
  - o the Possession Plan Reference Number (PPRN) detailed on the possession map
- agree the time when the arrangements for taking the possession may start

Accordingly please strike through the existing Section T Part 3, Clause 11.1 and endorse 'amended' and retain this notice at page T52 of the IÉ Rule Book.

W.C. 3751  
W.E. 29.01.17

**Head of Safety IÉ Infrastructure 400/8/T/02**

## 11.0 INSTRUCTIONS TO SIGNALMEN

### 11.1 WHAT YOU MUST DO BEFORE ARRANGING THE POSSESSION

- check the details of the possession with the person to act as PICOP
- agree the time when the arrangements for taking the possession may start

### 11.2 WHAT YOU MUST DO WHEN ARRANGING THE POSSESSION

#### 11.2.1 How you must arrange signal protection

- at the time you have agreed with the PICOP, you must provide signal protection
- you must place or maintain at Danger the signal in rear of the portion of line on which the possession is to be granted
  - the signal may be cleared for an unaffected route provided it is safe to do so
- arrange for all other signals leading to or across the possession to be placed to Danger and all points to be placed in the proper position for the possession
- arrange for all controlled signals applicable to the line under possession to be placed to Danger
- use the necessary reminder appliances
- advise any other Signaller involved and obtain an assurance that the requirements of this instruction will be observed

**NOTE: if you receive such advice from another Signaller, you must carry out this instruction and record in your Train Register the details of the arrangements made**

## 11.0 INSTRUCTIONS TO SIGNALMEN

- you must request this Signaller, where appropriate, to place the block indicator for the affected line to TRAIN ON LINE unless Single Line Working applies

### 11.2.2 What you must do concerning level crossings

- advise any Crossing Keeper affected of the arrangements for the possession
- observe the instructions for the operation of automatic crossings on lines under possession

### 11.2.3 When you must make an entry in the Train Register

- before entering the details of the arrangements in the Train Register, you must:
  - complete the signal protection and any arrangements concerning level crossings as described above
  - obtain the PICOP's assurance that the necessary protection is provided
- you must then make an entry in the Train Register as follows:
 

"(Down)(Up) ..... line

from detonators placed ahead of signals/points

Nos .....

to detonators placed in rear of signals/points

Nos .....

has been taken possession of by .....

(name of PICOP) at ..... (hours)"
- the PICOP is required to countersign this entry

## 11.0 INSTRUCTIONS TO SIGNALMEN

- where the PICOP is unable to come to the signal box because of the distance involved, you must obtain the PICOP's name and location and enter that with the time after the Train Register entry
- if the detonators are within the clearing point, you must endorse the entry accordingly
- where the possession is to be protected by the release of the Token, you must make a similar entry (in addition to any normally required) when handing over the Token to the PICOP
- you must then tell the PICOP that the possession has been granted

## 11.3 WHAT YOU MUST DO DURING THE POSSESSION

### 11.3.1 Concerning signal protection

- you must maintain at Danger the signal(s) protecting the possession
- you must also keep any points in the possession in the proper position except when a movement is to enter, leave or cross the possession there

### 11.3.2 Concerning movements towards the possession

- you must obtain the PICOP's permission before authorising any movement to:
  - proceed towards the detonators at either end of the possession, or
  - enter the possession at an intermediate point
- make sure the line is clear and safe for the movement in accordance with Section D
- advise the Driver of the circumstances

## 11.0 INSTRUCTIONS TO SIGNALMEN

- where necessary, instruct the Driver to pass at Danger the signal protecting the possession
- tell the Driver to proceed cautiously in accordance with Section D to the detonators
- the PICOP will arrange for you to be told when the movement has passed clear of the detonators or, when entering at an intermediate point, passed clear of the points
- where the PICOP has taken possession of a single line by obtaining the Token, you must obtain the PICOP's permission before authorising any movement to pass at Danger the protecting signal at either end of the single line

### 11.3.3 Concerning movements within the possession where a Handsignalman is required at the detonators

- the PICOP is required to obtain your permission before authorising a movement towards the detonators where a Handsignalman is required
- do not give this permission until any train for which signals are cleared has passed clear
- do not permit any train to pass over the points or crossings concerned after giving this permission until the movement towards the detonators is completed or has passed clear
- the person authorising this movement will tell you when it is completed or has passed clear

### 11.3.4 Concerning movements from the possession

- the PICOP will tell you when a movement is to leave the possession
- before authorising this movement, you must ensure the line is clear and safe for the movement in accordance with Section D

## 11.0 INSTRUCTIONS TO SIGNALMEN

### 11.3.5 Concerning movements crossing the possession

- the PICOP will tell you when protection has been provided and it is safe for a movement to cross the possession
- before authorising the movement, you must ensure that it is safe to do so
- you must tell the PICOP when the movement has passed clear of the line under possession and the points have been restored to the proper position for the possession

### 11.3.6 If you are relieved

- make sure your relief understands the arrangements for the possession

### 11.3.7 If you take duty

- you must countersign the entry in the Train Register

### 11.3.8 If the PICOP is relieved

- if relieved, the PICOP will tell you and give the name of the new PICOP

**NOTE: this applies only at the signal box where the possession was granted**

- you must record this information in the Train Register

### 11.3.9 If your signal box closes

- your signal box need not remain open provided movements will not need to enter or leave the possession there, but it must be open when the possession is given up
- you must tell the PICOP when your signal box is to close and when it has reopened

## 11.0 INSTRUCTIONS TO SIGNALMEN

### 11.4 WHAT YOU MUST DO WHEN THE POSSESSION IS GIVEN UP

#### 11.4.1 When the PICOP is ready to give up the possession

- if you are located at the signal box where the possession was granted, the PICOP will tell you when the possession is to be given up
- the PICOP will then arrange to withdraw the protection
- you must inform the PICOP if any person(s) withdrawing the protection advises you directly that this has been done

#### 11.4.2 When the protection is withdrawn

- the PICOP will tell you when the protection is withdrawn
- the PICOP is also required to inform you when the line is clear and safe to run on
- on receipt of this, you must make an entry in the Train Register as follows:

"(Down)(Up) ..... line

from detonators placed at .....

to detonators placed at .....

clear and safe to run on

Possession given up by ..... (name of PICOP)

at ..... (hours)"

- the PICOP is required to countersign this entry
- where the PICOP is unable to come to the signal box, you must enter the PICOP's name and location together with the time after the entry

## 11.0 INSTRUCTIONS TO SIGNALMEN

- where possession of a single line has been taken by obtaining the Token, the PICOP will return it to whichever signal box is more convenient: you must make and sign a note of the circumstances in the Train Register which the PICOP will countersign
- you must advise any other Signalman or any Crossing Keeper affected by the possession being given up
- you must request the Signalman at the signal box in advance to restore the block indicator to NORMAL unless Single Line Working applies
- any signal(s) which has been maintained at Danger to protect the possession may then be worked normally
- you must specially observe the operation of track circuits during the passage of the next train on the line concerned



## POSSESSION ARRANGEMENTS FORM

### PART A

### ARRANGEMENTS

I have been appointed by \_\_\_\_\_ to act as Person in Charge of the Possession of the \_\_\_\_\_ line(s) between \_\_\_\_\_ and \_\_\_\_\_ in accordance with Rule Book, Section T, Part 3.  
 Possession taken at \_\_\_\_\_ time/date. SIGNED \_\_\_\_\_ PICOP

### PROTECTION, ETC.

	<b>Locations</b>	<b>Arranged Time / Date</b>	<b>Withdrawn Time / Date</b>
Detonator protection ahead of signals/points No.(s) at _____	_____	_____	_____
Detonator protection in rear of signals/points No.(s) at _____	_____	_____	_____
Handsignalman positioned at _____	_____	_____	_____
Points secured at _____	_____	_____	_____
Signals maintained at Danger by signal post replacement switch at _____	_____	_____	_____
Other information _____	_____	_____	_____

### LEVEL CROSSINGS

<b>Location Type</b>	<b>Method of Working*</b>	<b>Arranged Time / Date</b>	<b>Withdrawn Time / Date</b>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

\* following codes to be used:

N - Normal working

EO - Emergency Operator provided

EOQ Emergency Operator provided (Part-time)

## POSSESSION ARRANGEMENTS FORM

## PART B

## RECORD OF WORK

Eng. Sup. <i>Name/Dept</i>	Work Site <i>Location</i>	Started Time / Date	Finished Time / Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

**NOTE:** Endorse entry with details of new ES (when relieved) and time /date

## PART C

## CHANGE OF PICOP

	Relieved PICOP Signature	New PICOP Signature	Time / Date
First Changeover	_____	_____	_____
Second Changeover	_____	_____	_____
Third Changeover	_____	_____	_____
Fourth Changeover	_____	_____	_____

## PART D

## POSSESSION GIVEN UP

I, being the PICOP giving up possession, certify that I have advised the Signalman at \_\_\_\_\_ that the line(s) is clear and safe for trains to run on.

SIGNED \_\_\_\_\_ time / date \_\_\_\_\_

**NOTE:** On completion, this form must be submitted in accordance with departmental instructions.

**ENGINEERING SUPERVISOR'S CERTIFICATE**

- NOTES (a) This certificate is referred to in the Rule Book, Section B, clause 6 and Section T, Part 3
- (b) It is additional to any required in connection with the isolation of the traction current
- (c) A separate form is needed for each line affected by the work

**PART A****AUTHORITY TO START WORK**

Authority is given by \_\_\_\_\_ (Name of PICOP) for work to start at \_\_\_\_\_ (location) affecting the \_\_\_\_\_ line.

SIGNED (\*) \_\_\_\_\_ PICOP at \_\_\_\_\_ time/date

NOTED by \_\_\_\_\_ ES at \_\_\_\_\_ time/date

(\*) insert PICOP's name if form dictated by PICOP

**PART B****CHANGE OF ES**

Certificate noted by relieving ES:

SIGNED \_\_\_\_\_ New ES at \_\_\_\_\_ time/date

SIGNED \_\_\_\_\_ New ES at \_\_\_\_\_ time/date

SIGNED \_\_\_\_\_ New ES at \_\_\_\_\_ time/date

**PART C****WHERE ES ALSO ACTING AS TSC**

I am acting as TSC for the \_\_\_\_\_ (description) work

SIGNED \_\_\_\_\_ ES at \_\_\_\_\_ time/date

I now certify that the work for which I am responsible as TSC

\*(a) is completed and everyone is clear of the line, OR

\*(b) is continuing without reliance on the possession arrangements

SIGNED \_\_\_\_\_ ES at \_\_\_\_\_ time/date

*\* Delete as appropriate*

**PART D****COMPLETION OF WORK**

I, being the ES at the above work site, certify that:

- (a) the portion of line affected by the work is now clear and safe for trains to pass
- (b) all marker boards have been removed
- (c) anyone remaining on or near the line has been told that traffic working may resume

SIGNED \_\_\_\_\_ at \_\_\_\_\_ time/date

## ENGINEERING SUPERVISOR'S CERTIFICATE

## PART E

## AUTHORITY FOR TSC TO START WORK

Authority is given by \_\_\_\_\_ (ES) to \_\_\_\_\_ (TSC)  
of \_\_\_\_\_ (dept) to start \_\_\_\_\_ (description)  
work within the work site

SIGNED \_\_\_\_\_ ES at \_\_\_\_\_ time/date

NOTED by \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

Authority noted by relieving TSC:

NOTED by \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

NOTED by \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

I certify that the work for which I am appointed as TSC

\* (a) is completed and everyone is clear of the line, OR

\* (b) is continuing without reliance on the possession arrangements

*\* Delete as appropriate*

SIGNED \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

Authority is given by \_\_\_\_\_ (ES) to \_\_\_\_\_ (TSC)  
of \_\_\_\_\_ (dept) to start \_\_\_\_\_ (description)  
work within the work site

SIGNED \_\_\_\_\_ ES at \_\_\_\_\_ time/date

NOTED by \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

Authority noted by relieving TSC:

NOTED by \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

NOTED by \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

I certify that the work for which I am appointed as TSC

\* (a) is completed and everyone is clear of the line, OR

\* (b) is continuing without reliance on the possession arrangements

*\* Delete as appropriate*

SIGNED \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

Authority is given by \_\_\_\_\_ (ES) to \_\_\_\_\_ (TSC)  
of \_\_\_\_\_ (dept) to start \_\_\_\_\_ (description)  
work within the work site

SIGNED \_\_\_\_\_ ES at \_\_\_\_\_ time/date

NOTED by \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

Authority noted by relieving TSC:

NOTED by \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

NOTED by \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

I certify that the work for which I am appointed as TSC

\* (a) is completed and everyone is clear of the line, OR

\* (b) is continuing without reliance on the possession arrangements

*\* Delete as appropriate*

SIGNED \_\_\_\_\_ TSC at \_\_\_\_\_ time/date

# PART FOUR

## PROTECTION OF ENGINEERING WORK IN SIDINGS

## 12.0 PRINCIPLES

### 12.1 NEED FOR PROTECTION

- protection must be provided on any siding before engineering work is started which will prevent its normal use
- normally, the whole siding must be protected
- if only part of the siding is affected and it is necessary for the normal use of another part of the siding to continue, protection must be provided on only the affected portion of the siding

**NOTE:** these instructions do not apply where work takes place on vehicles in sidings and a Designated Person Responsible for Protection (DP) is appointed as shown in Section B, clause 8

### 12.2 RESPONSIBILITY FOR ARRANGING PROTECTION

- the Engineering department concerned must appoint a person to be responsible for these arrangements
- this person is referred to in this Section T, Part 4 as the Person in Charge
- this person must be currently certificated as competent as a PIC (for the purpose of this Section T, Part 4)

## 13.0 INSTRUCTIONS TO PERSONS IN CHARGE OF ENGINEERING WORK IN SIDINGS

### 13.1 YOUR RESPONSIBILITIES

- to ensure that arrangements are made to prevent shunting movements taking place which could endanger (or be endangered by) engineering work in sidings

## 13.0 INSTRUCTIONS TO PERSONS IN CHARGE OF ENGINEERING WORK IN SIDINGS

### 13.2 WHAT YOU MUST DO BEFORE ARRANGING PROTECTION

- ascertain who is in charge of movements in the siding concerned
- agree with this person the extent and duration of the protection arrangements

### 13.3 WHAT YOU MUST DO WHEN ARRANGING PROTECTION

- ensure that the points leading to the siding are clipped and padlocked to prevent movements into the siding
- do this at both ends where necessary
- if, however, the points are worked from a signal box, you must first obtain the Signaller's permission
- if only a part of the siding is to be closed, you must:
  - first, tell the Shunter (if present) what is required
  - then place rail stops (or other approved devices) across the rails to prevent movements towards the work
  - place a red flag during daylight and a red light (steady or flashing) during darkness or poor visibility on the approach to the rail stops etc
  - do this at both ends where necessary

### 13.4 WHAT YOU MUST DO DURING THE WORK

- keep in your possession the key to any padlock used to secure points

### 13.0 INSTRUCTIONS TO PERSONS IN CHARGE OF ENGINEERING WORK IN SIDINGS

- check from time to time that any red flag(s) or light(s) which have been provided remain effective

### 13.5 WHAT YOU MUST DO WHEN THE PROTECTION IS NO LONGER REQUIRED

- make sure it is safe for shunting movements to be resumed
- arrange for the protection arrangements to be removed
- tell the Signaller where points worked from a signal box have been released

### 14.0 INSTRUCTIONS TO SIGNALMEN

#### 14.1 WHAT YOU MUST DO WHEN TOLD PROTECTION IS REQUIRED IN A SIDING

- the Person in Charge will tell you if it is necessary for points worked from your signal box to be secured to provide protection
- you must place these in the required position and tell the Person in Charge when this has been done

#### 14.2 WHAT YOU MUST RECORD IN THE TRAIN REGISTER

- the times when:
  - permission is given to secure the points
  - advice is received that they have been released



# SECTION U

## TEMPORARY AND EMERGENCY SPEED RESTRICTIONS

**Section U**

**Weekly Circular Amendment Record**

Any amendment to this Section U issued via a Weekly Circular Notice will be recorded in the table below and displayed until the respective Rule Book pages are issued.

WC No.	WE date	Description of Amendment
<p>3618</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 5px auto;"> <p style="color: red; margin: 0;"><b>SUPERSEDED – WC No. 3762 w.e 16.04.17</b></p> </div>	<p>13.07.14</p>	<p>Alteration to Emergency and Temporary Speed Restriction signage, new retro-reflective signage. Notice to be retained at page U4 until further notice.</p>
<p>3762</p>	<p>16.04.17</p>	<p>Alteration to ESR and TSR signage – Rollout of flashing white LED lights/beacons in place of existing two retro-reflective white circles throughout the network. Notice to be retained at page U4 until further notice.</p>

## 1.0 PRINCIPLES

### 1.1 NEED FOR DRIVERS TO BE INFORMED

- whenever possible, the requirement for a temporary speed restriction must be agreed beforehand
- this must be done in sufficient time for the details to be included in the Notice

### 1.2 NEED FOR EQUIPMENT TO BE PROVIDED

- equipment must be provided to indicate to Drivers the approach to, the start of and the end of a restriction
- the equipment is described in clause 2

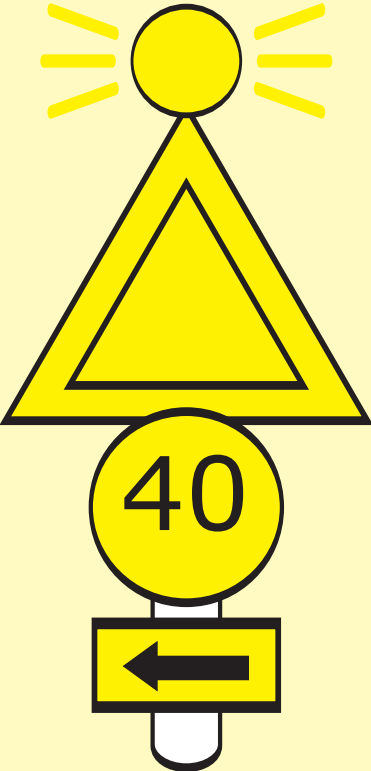
### 1.3 EMERGENCY SPEED RESTRICTIONS

- these are defined as restrictions which:
  - are not shown in the Notice, or
  - apply at times not shown, or
  - are more restrictive than shown
- additional arrangements must be made to alert Drivers to the presence of such restrictions

**NOTE:** where the details are given only in an amendment to the Notice, the restriction must still be regarded as an Emergency Speed Restriction

## 2.0 EQUIPMENT AND PROCEDURE

### 2.1 WARNING BOARDS

DIAGRAM	COMPRISING
	<p><b>COMPRISING</b></p> <ul style="list-style-type: none"> <li>• a black triangle on a yellow background</li> <li>• a circular yellow sign showing figures in mph, beneath the triangle</li> <li>• a flashing yellow beacon, operative during darkness or poor visibility, above the triangle (not provided on reflectorised Warning Boards)</li> </ul> <p><b>POSITIONING</b></p> <ul style="list-style-type: none"> <li>• 1600 metres (1 mile) from the start of the restriction</li> <li>• increased to 2km (1¼ miles) where permissible speed exceeds 120 kmh (75 mph)</li> </ul>

**NOTES:** a Directional Indication may be provided beneath the other indications: this means that the restriction ahead is on a route or line to the left (as shown) or right of the straight route at a diverging junction or connection

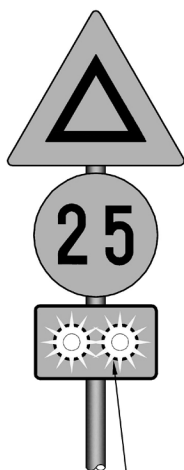
the straight route is normally as described in Section C

**ALTERATION TO EMERGENCY SPEED RESTRICTION (ESR) AND TEMPORARY SPEED RESTRICTION (TSR) SIGNAGE**

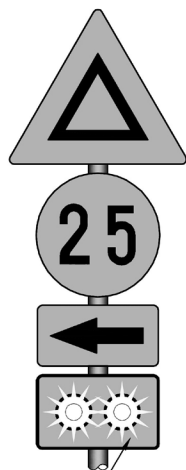
All concerned please note, the roll-out of the flashing white LED lights/beacons to enhance the sighting of roadside ESR and TSR signage has been completed and is now introduced throughout the Iarnród Éireann network.

The new sign as shown below, will have two flashing white LED lights/beacons in place of the existing two retro-reflective white circles, and will form part of the display for Warning 'A' boards and Repeat 'R' warning boards **only**. There is no change to the Commencement 'C' board display where two retro-reflective white circles will continue to be used.

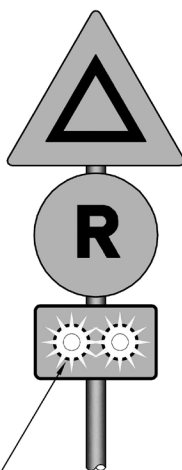
Warning 'A' Board  
Straight (Through)  
Route



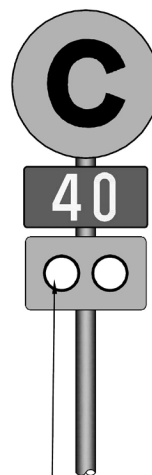
Warning 'A' Board  
Diverging  
(Deviating) Route



Repeat 'R' Warning  
Board



Commencement 'C'  
Board



Flashing White  
LED Beacons

Retro-reflective  
white circles

There is no change to the meaning of the ESR and TSR signage.

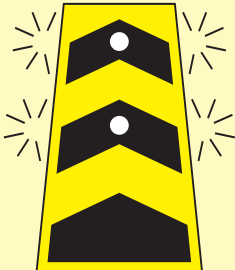
Until further notice this instruction must be retained within Section U of the Rule Book, inserting at Page U4. This notice supersedes previous notices published on page 7 in Weekly Circular No. 3618 W.E. 13/07/2014 and on page 6 in Weekly Circular No. 3761 W.E 09/04/2017.

W.C. 3762  
W.E. 16.04.17

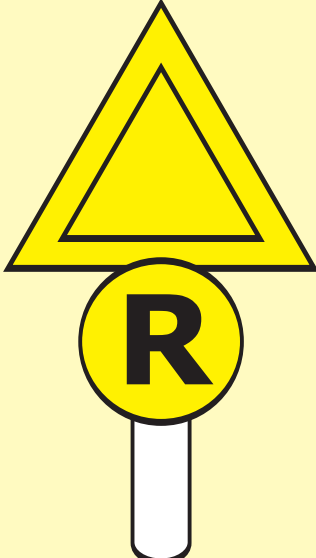
**Head of Safety IÉ Infrastructure 1100/21/11, 400/8/U/08**

## 2.0 EQUIPMENT AND PROCEDURE

### 2.2 EMERGENCY INDICATORS


DIAGRAM	COMPRISING
 <p>Bright white flashing lights</p>	<ul style="list-style-type: none"> <li>• upward pointing black arrows on a yellow background</li> <li>• two brilliant flashing white lights, operative at all times</li> </ul> <p><b>POSITIONING</b></p> <ul style="list-style-type: none"> <li>• 200 metres (200 yards) on the approach to the Warning Board</li> </ul>

### 2.3 REPEATING WARNING BOARDS

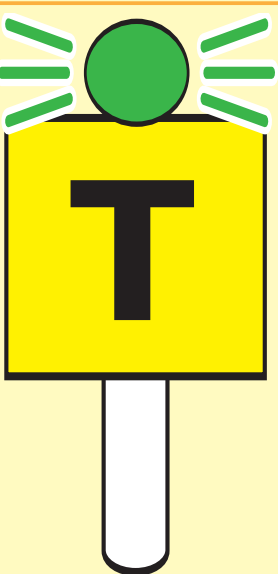
DIAGRAM	COMPRISING
	<ul style="list-style-type: none"> <li>• a black triangle on a yellow background</li> <li>• a circular yellow sign showing the letter “R” beneath the triangle</li> </ul> <p><b>POSITIONING</b></p> <ul style="list-style-type: none"> <li>• See clause 2.7.2</li> </ul>

## 2.0 EQUIPMENT AND PROCEDURE

### 2.4 'C' BOARDS

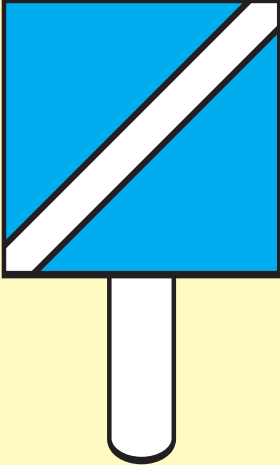
DIAGRAM	COMPRISING
	<ul style="list-style-type: none"> <li>• a black 'C' on a circular yellow sign</li> <li>• a rectangular blue sign showing white figures in mph, beneath the circular sign</li> <li>• a flashing white beacon, operative during darkness or poor visibility, above the circular sign (not provided on reflectorised 'C' Boards)</li> </ul> <p><b>POSITIONING</b></p> <ul style="list-style-type: none"> <li>• at the start of the restriction</li> </ul>

### 2.5 'T' BOARDS

DIAGRAM	COMPRISING
	<ul style="list-style-type: none"> <li>• a black 'T' on a square yellow sign</li> <li>• a flashing green beacon, operative during darkness or poor visibility, above the square sign (not provided on reflectorised 'T' Boards)</li> </ul> <p><b>POSITIONING</b></p> <ul style="list-style-type: none"> <li>• at the end of the restriction</li> </ul>

## 2.0 EQUIPMENT AND PROCEDURE

### 2.6 SPATE INDICATIONS

<b>DIAGRAM</b>	<b>COMPRISING</b>
	<ul style="list-style-type: none"> <li>white diagonal stripe on a blue background</li> </ul>
	<b>POSITIONING</b>
	<ul style="list-style-type: none"> <li>in place of the speed indications in the Warning Board and 'C' Board</li> </ul>

### 2.7 PROCEDURE

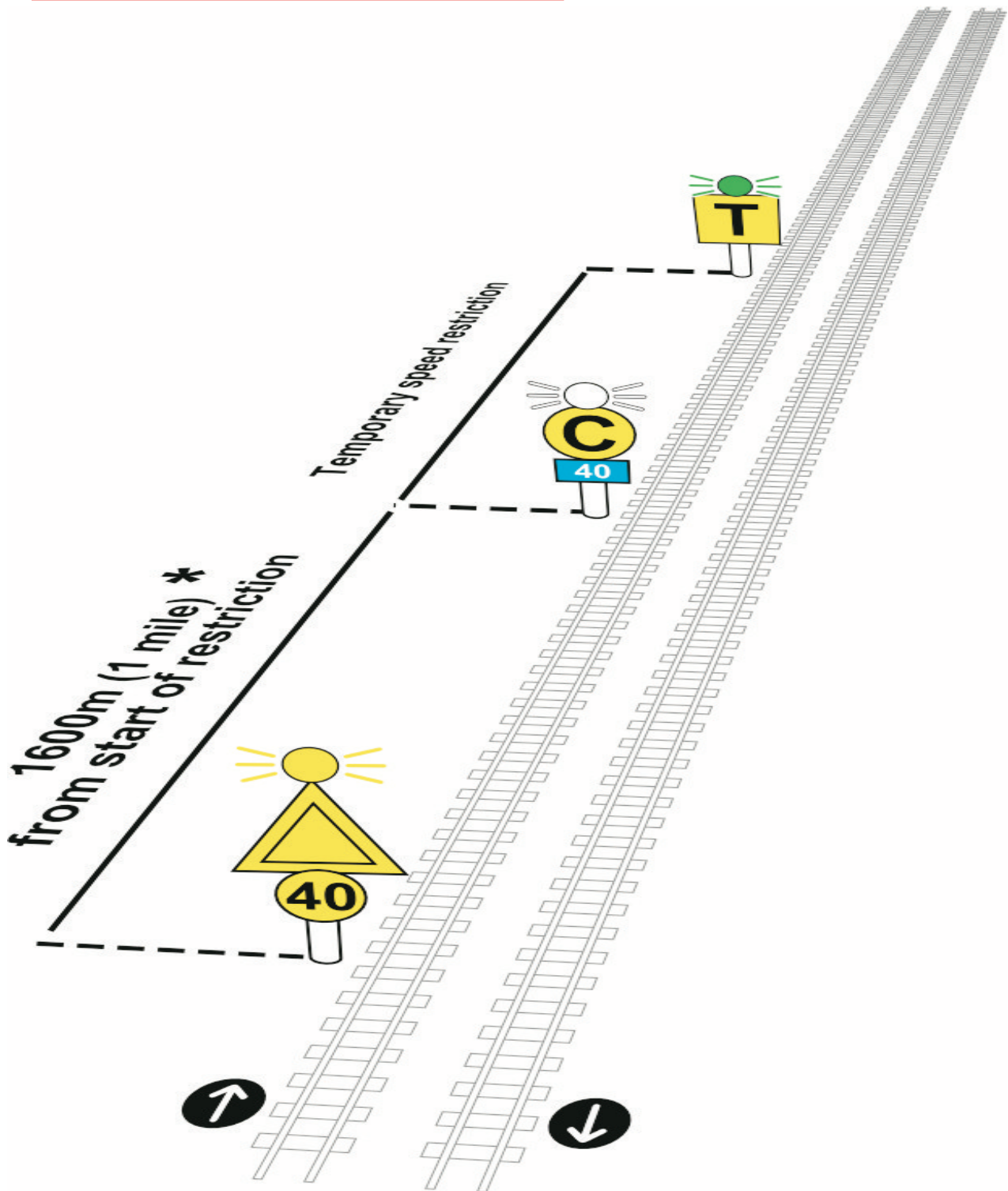
#### 2.7.1 Provision of equipment

- the equipment described in this clause 2 must be provided facing the direction from which trains approach
- on a single or bi-directional line, the equipment must be provided for each direction



## 2.0 EQUIPMENT AND PROCEDURE

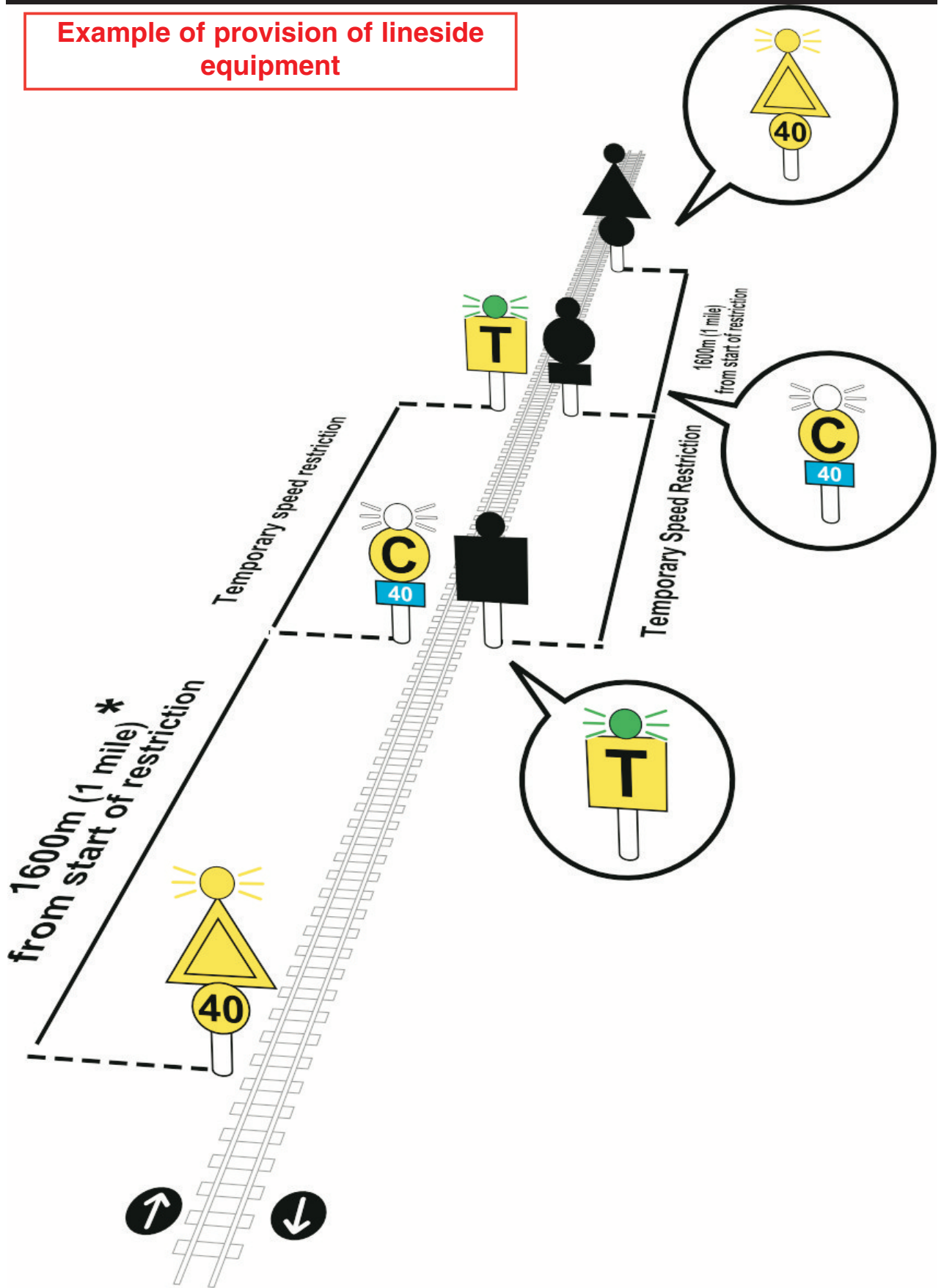
Example of provision of lineside equipment



\* Increase to 2 km (1<sup>1</sup>/<sub>4</sub> mile) where permissible speed exceeds 120 kmh (75mph)

## 2.0 EQUIPMENT AND PROCEDURE

**Example of provision of lineside equipment**



\* Increase to 2 km (1<sup>1</sup>/<sub>4</sub> mile) where permissible speed exceeds 120 kmh (75mph)

## 2.0 EQUIPMENT AND PROCEDURE

### 2.7.2 If there are stations or sidings, etc, between the Warning Board and the 'C' Board

- a Repeating Warning Board must be provided where:
  - the Warning Board is positioned on the approach side of a station, siding connection or dead end platform line, AND
  - the 'C' Board is more than 300 metres (300 yards) ahead of that location
- the Repeating Warning Board must be placed at the signal (where provided) or immediately ahead of that station, siding connection or dead end platform line

**NOTE:** references to the provision, absence or removal of Warning Boards include Repeating Warning Boards, where necessary

### 2.7.3 If there are restrictions on both the straight and diverging route

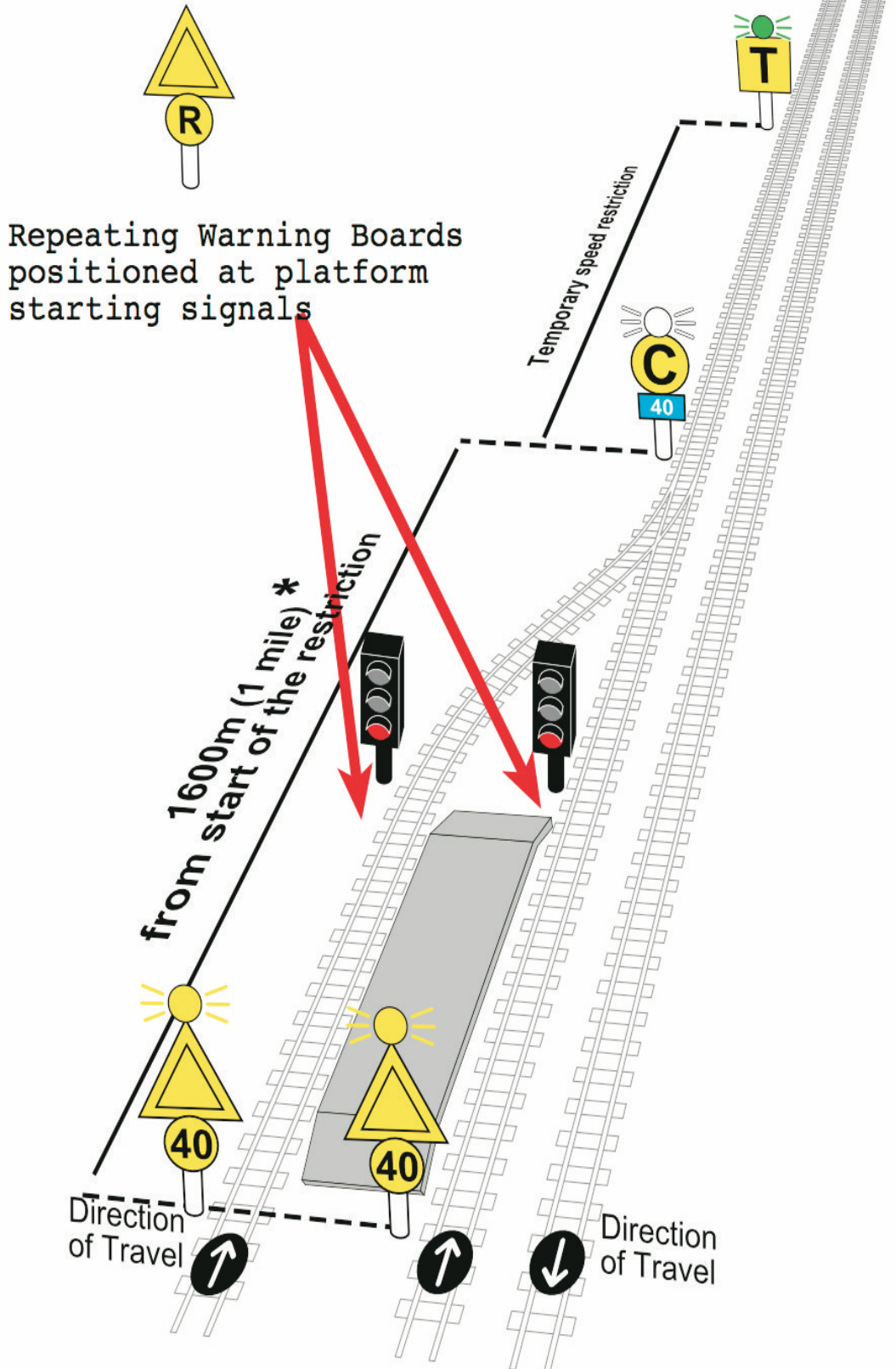
- this clause applies where a Directional Indication is needed for a restriction on a diverging line or route AND another restriction applies on the straight route
- in such circumstances, the Warning Board for the diverging route must be placed 50 metres (50 yards) after passing the Warning Board for the straight route

### 2.7.4 If there are consecutive restrictions

- a Warning Board must be provided for a consecutive restriction (i.e. one restriction immediately following another on the same line) ONLY if it is more restrictive than the preceding restriction

## 2.0 EQUIPMENT AND PROCEDURE

**Example of provision of Repeating Warning Boards**

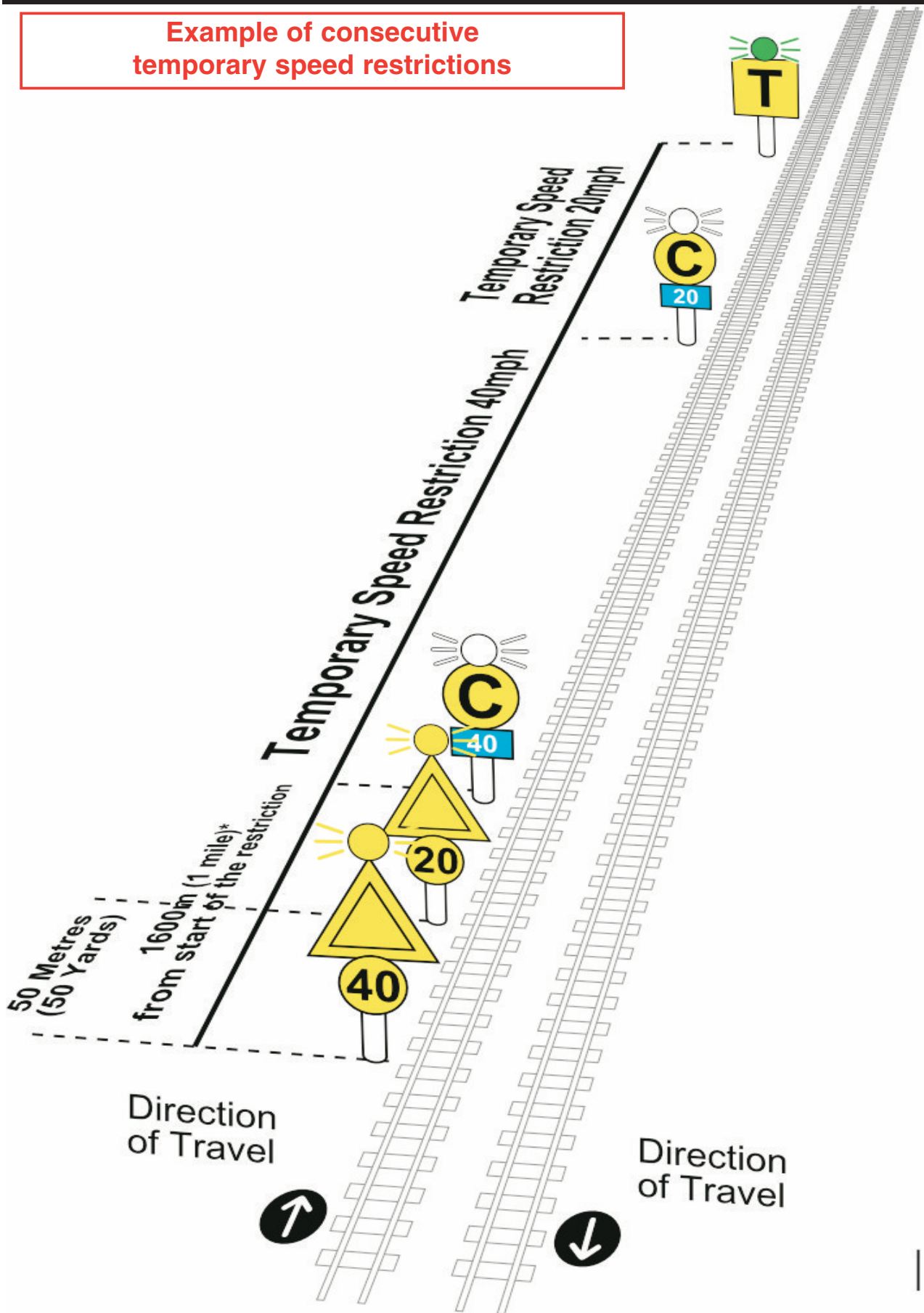


\*Increase to 2 km (1¼ mile) where permissible speed exceeds 120 kmh (75mph)



## 2.0 EQUIPMENT AND PROCEDURE

Example of consecutive temporary speed restrictions



\*Increase to 2 km (1¼ mile) where permissible speed exceeds 120 kmh (75mph)

## 2.0 EQUIPMENT AND PROCEDURE

- this Warning Board must be positioned 50 metres (50 yards) after passing the Warning Board for the preceding restriction

### 2.7.5 If an emergency speed restriction is required

- a Handsignalman must immediately be appointed to indicate the Warning Point and must remain there until whichever of the following occurs first:
  - the restriction is withdrawn, or
  - a Warning Board AND an Emergency Indicator are provided, or
  - details of the restriction are shown in the Notice
- Handsignalmen must also immediately be appointed to indicate the start and the end of the restriction and they must remain in position until whichever of the following occurs first:
  - the restriction is withdrawn, or
  - a 'C' Board and a 'T' Board are provided, or
  - details of the restriction are shown in the Notice
- if the restriction applies over a short distance, only one Handsignalman need be appointed to indicate the start and the end of the restriction; this person must be positioned at the end of the restriction
- on a single or bi-directional line, these arrangements must be made in each direction
- arrangements must also be made for the Driver of each approaching train to be informed of the circumstances
- this applies until the Handsignalmen (or equipment in their place) have been provided

## 2.0 EQUIPMENT AND PROCEDURE

- if, however, the restriction is more severe than 40 kmh (25 mph), this arrangement must continue until 24 hours after the posting of the details of the restriction at each depot concerned

### 2.7.6 If the restriction is to be eased or withdrawn earlier than shown in the Notice

- the speed indications in the Warning Board and 'C' Board must be altered to show the higher speed at which trains may run
- alternatively, where the restriction is withdrawn earlier than shown, Spate Indications may be used to replace the speed indications

### 2.7.7 If the restriction is cancelled

- provided 24 hours notice of the cancellation is given by the issue of a Special Notice, equipment need not be provided
- otherwise, the usual equipment must be provided but the speed indications in the Warning Board and 'C' Board must show the higher speed at which trains may run or Spate Indications must be used instead

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.1 WHAT YOU MUST DO WHEN APPROACHING A RESTRICTION

- you must reduce speed as necessary on passing the Warning Board

## 3.0 INSTRUCTIONS TO DRIVERS

### 3.2 WHAT YOU MUST DO WHEN PASSING OVER A SPEED RESTRICTION

- make sure that your speed does not exceed that required on entering the restriction as indicated by the 'C' Board
- make sure that speed does not then exceed that required while passing over the restriction until the last vehicle has passed the end of the restriction as indicated by the 'T' Board

### 3.3 WHAT YOU MUST DO IF YOU OBSERVE AN EMERGENCY INDICATOR OR A HANDSIGNAL INDICATING AN EMERGENCY SPEED RESTRICTION

- you must understand that an Emergency Speed Restriction has been imposed if you observe:
  - an Emergency Indicator followed by a Warning Board, or
  - a yellow handsignal waved slowly from side to side where a detonator(s) is exploded
- you must reduce speed to enable your train to pass over the restriction at 40 kmh (25mph) or at such other speed you have been instructed to observe

**REMINDER:**      **do not allow any handsignal to distract you from the correct observance of signals**

- where 'C' and 'T' Boards have not yet been provided, the limits of the restriction are indicated as follows:
  - START - yellow handsignal, held steadily
  - END - green handsignal, waved slowly from side to side



### 3.0 INSTRUCTIONS TO DRIVERS

- where the restricted portion of line is short, a Handsignalman may be positioned only at the end of the restriction and will exhibit a START handsignal until your train is close, when the END handsignal will be given

**NOTE:** if the restriction is more severe than 40 kmh (25 mph), you will be so informed by the Signalman until such information has been posted at your booking-on point for at least 24 hours

### 3.4 WHAT YOU MUST DO IF THE EQUIPMENT IS DEFECTIVE OR MISSING

- you must be alert for:
  - the failure of any light in the equipment, or
  - the absence of any equipment which should be provided
- if this occurs, you must:
  - tell the Signalman by the quickest means
  - use train-radio if available, but make sure you tell the Signalman in time for any following train to be alerted before passing the restriction if danger might arise

### 4.0 INSTRUCTIONS TO ENGINEER'S PERSONS IN CHARGE

#### 4.1 WHAT YOU MUST ARRANGE WHEN A TEMPORARY SPEED RESTRICTION IS TO APPLY

- a Warning Board must be provided at least 1600 metres (1 mile) from the start of the restriction
- where permissible speed exceeds 120 kmh (75 mph), this distance must be extended to 2 km (1<sup>1</sup>/<sub>4</sub> miles)

## 4.0 INSTRUCTIONS TO ENGINEER'S PERSONS IN CHARGE

- either distance must be extended on falling gradients or if necessary to obtain a better approach view
- a 'C' and 'T' Board must be provided at the start and end, respectively, of the restriction
- all equipment must be on the left hand side of the line, whenever practicable
- all equipment must be removed at the time shown in the Notice for the restriction to finish (unless an emergency speed restriction is required)

## 4.2 WHAT YOU MUST ARRANGE IF AN EMERGENCY SPEED RESTRICTION IS TO APPLY

- first, ensure that the Signaller is aware of the circumstances
- you must then arrange for Handsignalmen to be provided immediately as shown in clause 2.7.5
- if the restriction is to continue for some time, you must arrange for the necessary equipment to be provided to enable the Handsignalmen to be withdrawn

Not Used



# RULE BOOK

To operate from 5th January 2002  
(Reprinted 24th November 2007)

This Rule Book contains Section Z only

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## **ISSUE OF RULE BOOKS**

- this Section Z of the Rule Book is intended for employees who have duties on or near the electrified lines
- it is issued in addition to Sections A and B or Sections A to U according to your other duties
- it replaces, in part, the Electrified Lines Instructions issued by Irish Rail and the instructions concerning such lines in Northern Ireland Railways, Rule Book Appendix No 11
- the instructions concerning electrified lines previously in Section B have been deleted

Not Used

# **SECTION Z**

## **ELECTRIFIED LINES**



Not Used

## 1.0 PRINCIPLES

### 1.1 DANGER TO LIFE

- the overhead line equipment (OHLE) is electrified at 1,500 volts d.c.
- this is dangerous to life
- you must not touch or come near the OHLE or pantographs on trains or anything in contact with those items

### 1.2 LIVE EQUIPMENT

- you must assume that the OHLE and pantographs are **LIVE** at all times until made safe as shown in this Section Z

## 2.0 DEFINITION OF TERMS

- where the following terms are used in this Section Z, you must understand them to mean or include the following:

THE TERM:	INCLUDES OR MEANS:
<b>Bond</b>	An electrical connection to or in the negative running rail traction return circuit
<b>Earthed</b>	Connected to the running rail either directly or to a structure which itself is connected to the running rail
<b>Earth, local</b>	A portable appliance of approved type used to establish an electrical connection between the OHLE and the running rail or an earth wire or structures connected to the running rail

## 2.0 DEFINITION OF TERMS

<b>Electrical Control Operator</b>	The shift person being in charge of the Electric Control Centre and having control of the electrical power supply
<b>Electric Train</b>	A motor car and driving trailer car coupled together as a single unit and not normally uncoupled in normal service, which may be coupled with other units to form one train controlled by one Driver from one driving cab
<b>Emergency de-energisation</b>	An action carried out by the ECO when it is essential to switch off the electrical supply immediately to remove Danger to personnel from <b>LIVE</b> OHLE equipment
<b>Feeder</b>	A transmission line or cable in the power distribution system for: <ul style="list-style-type: none"> <li>- bringing a supply of electricity to a substation</li> <li>- connecting a substation to the OHLE</li> <li>- connecting the running rails to a substation</li> </ul>
<b>Isolated</b>	A term to indicate that the electrical equipment has been disconnected from any source of electrical supply
<b>Isolation Instructions</b>	Instructions in tabular form giving details of switching necessary when isolating any particular section of the OHLE
<b>Live</b>	Charged with electricity at an electrical voltage above or below earth potential
<b>Nominated Person</b>	An authorised person who has been certificated as competent to issue and cancel Permits to Work and perform switching/isolation/earthing operations
<b>Pantograph</b>	A collapsible frame mounted on insulators on the roof of an electric motor car which bears against the contact wire and through which current is collected from the OHLE

## 2.0 DEFINITION OF TERMS

<b>Permit to work</b>	A form of declaration, signed and issued by a Nominated Person to a Person in Charge of Work to be carried out on or adjacent to any electrical equipment, for the purpose of making known exactly which equipment is dead and earthed and on or adjacent to which it is safe to work
<b>Person in Charge of Work (PICOW)</b>	An authorised person who has been certificated as competent to take charge of work on or in the vicinity of the OHLE
<b>Section</b>	A length of OHLE between substations and/or switch houses, which can be sub-divided into shorter sections by the operation of overhead line switches, and which may be isolated from all other lengths of OHLE
<b>Section Insulator</b>	A device for opening or closing an electrical circuit
<b>Substation</b>	An installation of electric equipment for converting alternating to direct current for the supply of power to electric traction
<b>Supervisory Control</b>	An electrical system for the remote control of unattended substations and switch houses
<b>Switch</b>	A device for opening and closing an electric circuit
<b>Switch House</b>	A building containing direct current switchgear for electrically connecting together a number of sections of OHLE, but not containing any converting apparatus
<b>Working Limits</b>	The limits stated on a Permit to Work, usually by means of structure numbers, between which it is safe to work

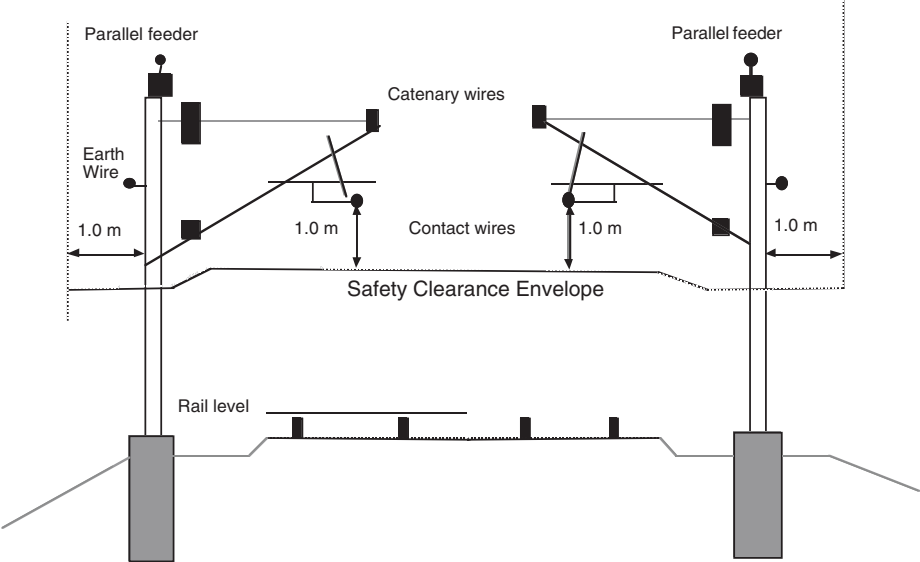
## 3.0 DESCRIPTION AND EXTENT OF THE SYSTEM

### 3.1 DESCRIPTION OF THE SYSTEM

- the system uses overhead conductors carrying electricity at 1,500 volts, d.c. (direct current)
- electricity is supplied from the main grid system as three phase alternating current (ac) at 38,000 volts to the Sub stations where it is converted to 1,500 volts d.c. for distribution to the OHLE
- the overhead conductors (OHLE) comprise:
  - a copper contact wire in direct contact with the pantograph
  - a copper messenger wire, which is the uppermost wire from which the contact wire is suspended
  - droppers, which connect the contact wire and the messenger wire
- collectively, these three items form the catenary
- the height of the contact wire above rail level (ARL) is:
  - normal height: 4.7 metres
  - maximum height: 5.6 metres
  - minimum height: 4.2 metres

### 3.0 DESCRIPTION AND EXTENT OF THE SYSTEM

- a typical cross section of OHLE is as follows:-



## 3.0 DESCRIPTION AND EXTENT OF THE SYSTEM

### 3.2 EXTENT OF SYSTEM

#### 3.2.1 Identification of electrified areas

- the running lines and certain associated lines and sidings are electrified between:
  - Howth Junction and Greystones
  - Howth Junction and Howth
  - Howth Junction and Malahide
- control of the electrical supply and OHLE is supervised from the Electrical Control Centre, Connolly CTC

#### 3.2.2 Limits of an electrified area

- notice boards warning of the entry of an electrified area are provided at certain locations
- the limiting point beyond which electric trains must not pass is identified by a reflectorised EMU STOP marker board

#### 3.2.3 Alterations to electrified areas

- where new OHLE is installed or the electrified area extended, the instructions in this Section Z apply only when the equipment has been declared **LIVE** by publication of an Energisation Notice
- this notice will appear:
  - in the Weekly Notice, or
  - on posters at appropriate locations, or
  - where necessary, on individual notices issued to staff

## 4.0 DANGER FROM OVERHEAD LINE EQUIPMENT

### 4.1 WHERE DANGER MAY ARISE

- you must assume that the OHLE and pantographs are **LIVE** at all times until made safe in accordance as shown in this Section Z
- this includes:
  - all parts such as wires, insulators or conductors which are part of the OHLE or pantographs
  - any broken or displaced wires attached to the OHLE
  - any item which is in contact with the OHLE or pantographs
- you must also be aware that a dangerous voltage may be present if the rails are broken or separated (accidentally or during work) or the bonds become detached
- the traction current passing normally through the rails and the bonding system does not, however, present any danger to life
- all signals are positioned (and screens are provided where necessary) to enable you to carry out your normal duties safely

### 4.2 PRECAUTIONS YOU MUST TAKE

- you must keep at least one metre (3 feet) from any part of the equipment which is **LIVE**
- this also applies to your clothing and tools or equipment you are carrying
- take particular care not to endanger yourself when in cuttings or on embankments or on structures or vehicles



## 4.0 DANGER FROM OVERHEAD LINE EQUIPMENT

### 4.3 WHEN IT IS NECESSARY TO WORK ON OR IN THE VICINITY OF OHLE

- you must not carry out any work on or in the vicinity of the OHLE unless an authorised safe system of work has been provided as shown in clause 7

**NOTE:** Contractors must comply with the Method of Working Instructions issued by the Divisional Engineer

### 4.4 IF IT NECESSARY TO RESCUE SOMEONE OR REMOVE OBJECTS FROM LIVE OHLE

- you must observe the instructions in Clause 6

## 5.0 COMMUNICATIONS

### 5.1 COMMUNICATION WITH THE ELECTRICAL CONTROL OPERATOR (ECO)

- you can contact the ECO directly by:
  - fixed or mobile telephone, using the designated number(s), or
  - lineside telephone by dialling 0, or
  - train radio (PABX)

### 5.2 NUMBERING OF FORMAL MESSAGES

- messages between the ECO and others will be given a unique number by the ECO
- the number will be a four digit number based on its time of dispatch

## 5.0 COMMUNICATIONS

- as examples, a message despatched at 6.15am will be numbered 0615 and a message despatched at 6.15pm will be numbered 1815

### 5.3 IDENTIFICATION OF THE LOCATION

- you must observe the requirements of Section A concerning communication when reporting any unusual occurrence or incident
- in addition, you must whenever possible give the number of the nearest OHLE structure or identifying plate
- when giving a formal message concerning a PERMIT TO WORK or position of local earths etc, you must state:
  - the number of the OHLE structure(s)
  - the name of the line(s) to which the message applies

## 6.0 EMERGENCIES

### 6.1 IF YOU NEED AN EMERGENCY DE-ENERGISATION OF THE TRACTION CURRENT

- you must contact the ECO immediately and arrange for an emergency de-energisation of the traction current if you become aware of:
  - a derailment, or
  - a lineside fire or fire on a rail vehicle, or
  - anyone in contact with, or in danger of coming in contact with the OHLE, or
  - an accident or other emergency requiring, or likely to require the electricity supply to be switched off, or

## 6.0 EMERGENCIES

- damage to the OHLE
- when making an emergency call you must:
  - use an electrification telephone where available
  - say “THIS IS AN EMERGENCY CALL”
  - explain the circumstances and indicate whether anyone is or may be in danger from **LIVE** OHLE
  - give the location (including the number of the nearest structure)
  - say specifically if the Emergency Services (Gardai, Fire Brigade, Ambulance) are waiting to render assistance
  - arrange for someone (yourself if necessary) to remain in contact with the ECO so that the current can safely be restored when the emergency has passed
- if unable to contact the ECO directly, you must give the above information to someone who will have direct contact with the ECO
- if you receive such information concerning an emergency you must immediately relay it to the ECO, adding your name, grade, department and location

### 6.2 IF IT IS NECESSARY TO RESCUE A PERSON IN DANGER FROM LIVE OHLE

- you must obtain an assurance from the ECO that an emergency de-energisation has been arranged before rescuing someone in danger from **LIVE** OHLE

## 6.0 EMERGENCIES

- it is not, however, essential to have the electricity switched off before attempting a rescue provided you are absolutely certain that:
  - the casualty is completely below the OHLE, and
  - the casualty is also at least one metre (3 feet) from the OHLE, and
  - no part of your body, clothing or anything you are holding will come within that distance of the OHLE

**REMEMBER:**      **reference to the OHLE includes anything in contact with it**

- in these circumstances, it is safe to touch the casualty as there is no harmful electrical charge left in the body

**IMPORTANT:**      **bare hands must be covered with a material which will not conduct electricity**

### 6.3 IF IT IS NECESSARY TO REMOVE OBJECTS FROM LIVE OHLE

- you must advise the ECO immediately if you observe any object hanging from, in contact with, or close to the OHLE
- do not attempt to remove or approach it
- only the OHLE Maintenance Staff or anyone specially trained and authorised to do so may remove such objects and then only after the ECO and Signaller have agreed a suitable interval during which the electricity may be switched off (the OHLE being de-energised but not earthed) to enable this to be done

## 6.0 EMERGENCIES

- the ECO will make the necessary arrangements for its removal

### 6.4 IF THE LINE BECOMES FLOODED

- you must advise the Traffic Regulator immediately if you observe or become aware of flooding above sleeper level
- say whether the water is still or flowing

**NOTE: if there is an immediate danger to trains, you must observe the provisions of Section T, Part 1**

- the passage of electric trains through floods will normally be restricted, as follows:
  - flooding more than half way up the running rails:  
WALKING PACE
  - flooding above the top of the running rails:  
SUSPENDED

**NOTE: the passage of all trains will be suspended if there is any risk of damage to the track or formation**

## 7.0 SAFETY PRECAUTIONS WHEN WORKING ON OR NEAR ELECTRIFIED LINES

### 7.1 BASIC PRINCIPLES

- you must not work on or near the line (whether electrified or not) unless under the direction of a Track Safety Co-ordinator (TSC) as shown in Section B
- when working on or near an electrified line, you must additionally take the precautions shown in this clause 7 to ensure that you are not endangered by **LIVE** OHLE
- if however, the work is on or in the vicinity of the OHLE, you must not start work until authorised by the Person in Charge of Work (PICOW) who may also be your TSC
- the PICOW is responsible for obtaining a PERMIT TO WORK which is issued only after the OHLE has been properly de-energised and earthed
- the PICOW will tell you the limits within which it is safe to work on or in the vicinity of the OHLE
- there are two exceptions to the requirement for a PICOW and a PERMIT TO WORK; these are:-
  - (a) where a local isolation is authorised and the OHLE has been isolated and earthed and an assurance to this effect is received in accordance with local instructions
  - (b) where the OHLE has been made safe in an emergency and an assurance to this effect is received from the ECO

### 7.2 WORKING ON OR NEAR THE LINE WHERE THE OHLE IS LIVE

#### 7.2.1 Precautions to be taken

- if you have not been told that the OHLE is isolated you must assume that it is **LIVE** and take the following precautions:

## 7.0 SAFETY PRECAUTIONS WHEN WORKING ON OR NEAR ELECTRIFIED LINES

- keep paint, water and other liquids well away from where they could be thrown, fall or splash on to **LIVE** OHLE
- keep all tools and equipment well clear of **LIVE** OHLE
- carry pipes, rods, poles, brooms, mops or ladders etc, horizontally
- take special care when standing on the floor or load of open wagons if the OHLE is **LIVE** on the next line
- make sure there is no possibility of branches or debris falling on to **LIVE** OHLE when trimming or felling trees etc
- use ladders made of wood or approved non-conducting materials

### 7.2.2 Activities permitted only where authorised

- the following activities are permitted where the OHLE is **LIVE**, **ONLY** at authorised locations where local instructions are issued:
  - manual exterior cleaning of coaching stock
  - cleaning of vehicle ends, cab windows, destination indicators etc
  - manual loading/unloading of open wagons
- where such authority is given, you must observe the following instructions if the OHLE is **LIVE**:
  - before starting work, check that all pantographs are lowered
  - do not clean above the bodyside livery on coaches

## 7.0 SAFETY PRECAUTIONS WHEN WORKING ON OR NEAR ELECTRIFIED LINES

- do not clean vehicle ends, cab windows or destination indicators unless authorised in those instructions
- do not use hosepipes

### 7.2.3 Prohibited activities

- the following activities are NOT permitted where the OHLE is **LIVE**:
  - climbing above the floor level of any driving cab
  - climbing on the roof of any rail vehicle or on steps giving access to the roof
  - using a crane, plant and equipment or similar apparatus which is capable of being extended
  - securing of wagon sheets, unless there is no possibility of them coming within one metre (3 feet) of **LIVE** OHLE
  - ANY OTHER ACTIVITY where there is any possibility of a person's body, clothing or anything being used coming within one metre (3 feet) of **LIVE** OHLE pantographs

**EXCEPTION:** you may use approved voltage testing devices and approved live line appliances provided you are trained in their use

## 7.3 WORKING ON OR NEAR THE LINE WHERE THE OHLE IS ISOLATED

- you must not start any work necessitating isolation of the OHLE (except as shown in clause 7.1(a) or (b)) until authorised by the PICOW



## 7.0 SAFETY PRECAUTIONS WHEN WORKING ON OR NEAR ELECTRIFIED LINES

- the PICOW will tell you:
  - the working limits for which a PERMIT TO WORK is valid
  - where **LIVE** equipment is adjacent to or crosses over the earthed equipment, which equipment is **LIVE** and which is earthed
- before starting work, make sure you fully understand the arrangements made by your PICOW to avoid danger from **LIVE** equipment

**REMINDER:**        **the issue of a PERMIT TO WORK does not mean that train movements are stopped; you must also comply with the instructions given by the TSC to ensure your safety**

## 7.4 DAMAGE OR INTERFERENCE TO OHLE STRUCTURES

- you must take care to prevent interference with any part of the electrification fixed structures
- do not fix or attach anything to them unless authorised by the Chief Engineer, Infrastructure
- you must not carry out any excavations or other work (including alterations to the track or lineside structures) which may affect them, unless authorised by the Chief Engineer, Infrastructure
- you must immediately inform the ECO of any of the following:
  - objects hanging from the OHLE
  - damage to the equipment
  - smoking, excessive flashing or fusing on the OHLE

## 7.0 SAFETY PRECAUTIONS WHEN WORKING ON OR NEAR ELECTRIFIED LINES

- broken or displaced conductors

### 7.5 BONDS

- you must not carry out any work on the running rails involving the breaking of the associated bonds or connections unless authorised by the Chief Engineer, Infrastructure
- where work involving the breaking of the running rail is to be carried out, bonding must first be installed as required by the Chief Engineer, Infrastructure
- you must immediately tell the ECO if a broken or displaced bond is found (except during planned electrification maintenance) giving the location and type of bond and details of the defect
- similarly, you must tell the ECO if the electrical continuity of the running rail is interrupted by a divided or broken rail

### 7.6 USE OF LADDERS

- when using ladders, you must:
  - use only those made of wood or approved non-conducting materials and not with metal re-enforcing strips on the sides
  - keep them well away from **LIVE** OHLE
  - carry them horizontally, using two persons if necessary
  - avoid using ladders longer than necessary for the work required

**IMPORTANT:** even ladders as described above are dangerous if touching or close to **LIVE OHLE**

## **7.0 SAFETY PRECAUTIONS WHEN WORKING ON OR NEAR ELECTRIFIED LINES**

- you may use specially approved aluminium ladders for work on electric trains ONLY if you are trained and authorised in their use

## **7.7 USE OF CRANES, ETC**

- you must not use a crane, etc except as shown in Section B, clause 3.4
- in addition you must not bring or set up the crane, etc in the vicinity of the OHLE until authorised by the PICOW who will first explain to you the conditions shown in the PERMIT TO WORK
- you must strictly comply with those conditions
- you must take particular care not to damage the OHLE and, if this happens, you must arrange for the ECO to be advised immediately