

# **SIGNALMEN'S GENERAL INSTRUCTIONS**

## **ISSUE 01/20**

I, the undersigned, acknowledge receipt of this publication. I undertake to familiarise myself with any alterations which apply to me.

**FULL NAME (CAPITALS)** \_\_\_\_\_

**STAFF NUMBER** \_\_\_\_\_

**GRADE** \_\_\_\_\_

**LOCATION** \_\_\_\_\_

**SIGNATURE** \_\_\_\_\_

**DATE RECEIVED** \_\_\_\_\_

**Please hand this form to your Manager/  
Supervisor on completion**



### REISSUED PAGES

- some alterations are being made to these Instructions
- for convenience, all pages are reissued and the existing pages must be discarded
- each new or altered item on the reissued pages is indicated by a vertical black line in the margin
- a short vertical black line against a blank space indicates that an item has been deleted

### EXPLANATION OF PRINCIPAL CHANGES

#### **SGI 6**

- this now includes instructions previously in Rule Book, Section K

#### **SGI 11**

- this section now contains rules for obtaining protection for safety of train crew and persons retrieving items from the track
- former rules for TSC have been removed as these are now contained within Section T of the Rule Book

#### **SGI 14.3 & 14.4**

- these instructions were previously in Rule Book, Section U

#### **SGI 14.6 & 14.7**

- these are new instructions concerning failures or irregularities affecting TPWS

#### **SGI 17**

- these instructions were previously in Rule Book, Section J

### **SGI 20.5**

- this is a new instruction concerning passing signals at Danger or making unsignalled wrong direction movements where TPWS applies

### **OPERATIVE DATE**

- these alterations apply from 24th November 2007

### **CHANGES TO SGI 34 (APRIL 2015)**

- Amendments made to reflect changes in legislation and new instructions added regarding the use of crossings within a possession.

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## 1.0 GENERAL REQUIREMENTS

### 1.1 YOUR RESPONSIBILITY

- to ensure the safe working of trains
- to ensure that the relevant Rules and Train Signalling Regulations are observed when:
  - signalling trains
  - authorising other movements

**NOTE:** you must immediately inform the Local Manager (or Signal Box Supervisor) if an adjacent Signaller is working irregularly

### 1.2 CHANGING DUTY

- you must change duties only at the booked time
- tell your Supervisor if your relief does not arrive within 10 minutes of the booked changeover time
- when relieved, make sure your relief is fit to take charge
- give your relief any necessary information concerning:
  - train movements
  - failure of signalling equipment
  - emergency working arrangements
  - engineering work
  - crossing movements at level crossings

## 1.0 GENERAL REQUIREMENTS

- when you have ensured your relief fully understands this information, you must:
  - sign the Train Register immediately beneath the last entry on each page
  - leave the signal box without delay
- when relieving, you must:
  - ensure you receive and fully understand the information described above
  - sign the Train Register to indicate you have taken duty

## 1.3 PRIVACY OF SIGNAL BOXES

- you must not allow any unauthorised person to enter your signal box
- you must not permit anyone authorised to enter the signal box in connection with the Rules or their railway duties to remain longer than necessary
- you must not allow signalling equipment to be operated by an unauthorised person

## 1.4 EQUIPMENT, ETC

- signal boxes and equipment must be kept clean
- emergency equipment, forms and a hand lamp (as appropriate to the type of signal box) must be kept readily available in a recognised place
- shortages of any equipment which could affect the working of trains must immediately be reported to the Local Manager (or Signal Box Supervisor)



## **1.0 GENERAL REQUIREMENTS**

- clocks must be checked and corrected daily between 09.00 and 11.00

## **1.5 LEAVING THE SIGNAL BOX**

- you must inform each adjacent Signalman if you are to leave the signal box to attend to signal lamps or for any other reason
- this does not apply if:
  - there is another Signalman on duty, or
  - you are leaving the signal box in accordance with the Rules
- you must make an entry in the Train Register if informed that an adjacent Signalman is leaving the signal box as described above

## **2.0 RECORDING IN THE TRAIN REGISTER**

### **2.1 LEGIBILITY AND CORRECTIONS**

- all entries must be made legibly and with a pen
- if an error is made, you must draw a line lightly through it (so that it can still be clearly seen) and make the correct entry above or below it
- you must not leave blank lines between entries

## 2.0 RECORDING IN THE TRAIN REGISTER

### 2.2 BELL SIGNALS AND DESCRIPTIONS

- you must record the times at which:
  - bell signals are sent and received
  - descriptions are sent and received
  - trains arrive, depart or pass the signal box
- times must be recorded to the nearest whole minute
- you must record the hour/minute figures for the top entries in each column on each page and for the first entry in each column for that particular hour: the minutes only need be shown for other entries in each column

### 2.3 OTHER ENTRIES

- you must make an appropriate entry in connection with any unusual incident or where required in accordance with the Rules
- include the radio call number or telephone number of anyone calling in connection with an incident or emergency
- where provided, you may use an appropriate rubber stamp, etc to assist when making entries
- where you are required to sign the entry, you must also ensure that it is countersigned by any other Signaller in your signal box who is affected by it

## 3.0 REGULATION OF TRAINS

### 3.1 GENERAL PRINCIPLES

- as far as practicable, trains must be signalled so as to minimise delays
- passenger trains must generally take precedence over other trains
- you must observe or ascertain as necessary how trains are running in order to achieve this

## 4.0 BELL SIGNALS

### 4.1 CALL ATTENTION

- you must send the Call attention signal (1 beat) before sending any other signal **EXCEPT**
  - train entering section
  - restricted acceptance
  - train out of section
  - obstruction removed
  - cancelling
  - train incorrectly described
  - ANY emergency signal
- you must acknowledge the Call attention signal immediately on receipt
- if necessary to attract the attention of the other Signalman in an emergency, give a rapid succession of beats on the bell

## 4.0 BELL SIGNALS

### 4.2 STANDARD CODE OF BELL SIGNALS

- you must use the bell signals shown in the Train Signalling Regulations and these Signalmen's General Instructions
- when sending the Is line clear signal, you must use the appropriate code as shown below:
  - express passenger train 4
  - train required to proceed urgently in connection with an incident or failure 4
  - ordinary passenger train 3-1
  - empty coaching stock train 2-2-1
  - freight train 3-2
  - light locomotive(s) 2-3
  - Engineer's on-track machine(s) 3-2-2
  - train (including Engineer's on-track machine) required to stop in section 1-2-2

### 4.3 REPETITION AND ACKNOWLEDGEMENT OF BELL SIGNALS

- you must acknowledge all bell signals by repetition (except where otherwise shown in the Train Signalling Regulations)
- you must send again at short intervals the following bell signals if not acknowledged
  - Is line clear or Release Token
- you must not consider any bell signal as understood until correctly repeated

## **5.0 WORKING OF SIGNALS**

### **5.1 GENERAL PRINCIPLES**

- you must ensure that the Rules and Instructions have been complied with before any signal is cleared
- when you are required to place or maintain a signal at Danger, you must ensure that the Danger aspect or indication is correctly displayed

### **5.2 CLEARANCE OF STOP SIGNALS WHEN THE NEXT SIGNAL IS AT DANGER**

- this instruction does not apply to multiple aspect signals
- if you are not in a position to clear a stop signal, you must also keep the stop signal in rear of it at Danger until the approaching train has nearly stopped

### **5.3 CLEARANCE OF SIGNALS WHEN THE SECTION SIGNAL IS AT DANGER - IN ALL WEATHERS**

- if you are unable to ensure that the section signal is at Danger, you must keep the stop signal in rear of it at Danger unless you can inform the Driver of the circumstances
- if the movement comprises a traction unit which cannot be relied on to operate track circuits, you must not allow it to pass beyond your view to await clearance of the section signal (whether or not track circuits are provided)

### **5.4 CLEARANCE OF SIGNALS WHEN THE SECTION SIGNAL IS AT DANGER - DURING FOG OR FALLING SNOW**

- unless a track circuit is provided, you must not allow a train to pass beyond your view to await clearance of the section signal

## 5.0 WORKING OF SIGNALS

- in addition, where a semaphore section signal is provided, you must not allow a train to draw forward to the signal to await acceptance unless this is necessary for station or shunting duties

### 5.5 CLEARANCE OF CALL-ON SIGNALS

- this instruction does not apply to approach released signals
- you must not clear a call-on signal before the train has nearly stopped at it

### 5.6 CLEARANCE OF SIGNALS AT DIVERGING JUNCTIONS

- this instruction applies if:
  - a train is to pass from one line to another at a junction where speed is to be reduced, AND
  - the route to be taken by the train is NOT that shown in the Working Timetable (or Notice amending it), AND
  - the junction stop signal is NOT approach released
- you must not clear the junction signal until the approaching train is close enough to it to ensure its speed is sufficiently reduced
- you must not clear the next stop signal ahead (where provided) before the junction stop signal is cleared
- if the train approaches a junction stop signal before you are able to set up the required route, you must then check, as far as practicable, that it is still safe to do so having regard to the position and speed of the train

## **5.0 WORKING OF SIGNALS**

### **5.7 REPLACEMENT OF SIGNALS TO CAUTION**

- you must replace a distant signal to Caution as soon as you can ascertain that the train has passed the signal

### **5.8 REPLACEMENT OF SIGNALS TO DANGER**

- you must replace a stop signal to Danger immediately the last vehicle has passed it
- if there are facing points ahead of the signal, you must replace it to Danger immediately the last vehicle has passed clear of those points
- if the train stops partly in rear of a stop signal, you must replace it to Danger immediately the train stops
- where an emergency signal replacement facility is provided, you must not rely on this to place or maintain signals at Danger in any circumstances other than an emergency unless otherwise shown in the Special Instructions at your signal box

### **5.9 AUTOMATIC REPLACEMENT OF SIGNALS TO DANGER**

- you must operate the signal control devices to the normal position as shown in Instruction 5.8 where signals are automatically replaced to Danger by the passage of trains
- you may normalise the control device operating a stop signal worked from a route setting panel as soon as the whole train has passed the signal

## **5.0 WORKING OF SIGNALS**

### **5.10 REPLACEMENT OF SIGNALS TO DANGER BEFORE THE TRAIN PASSES OR STOPS**

- after clearing a stop signal for a train to proceed, you must not replace it to Danger before the train passes unless:
  - there is an emergency, or
  - it is necessary to alter the priority of trains at a junction as shown in Instruction 5.11, or
  - the train stops or remains at the signal, as shown in Instruction 5.12

### **5.11 REPLACEMENT OF SIGNALS TO DANGER AT CONVERGING JUNCTIONS**

- if two or more trains are approaching a junction and signals have been cleared for a train which should have been held back, you may reverse the order of trains only as follows:
  - check that the train approaching under clear signals is still far enough away not to encounter changed aspects or indications if signals are replaced to Danger
  - if so, you may then replace those signals to Danger
  - wait until that train has stopped at the junction signal
  - you may then operate the points and clear the signals for the other train

### **5.12 REPLACEMENT OF SIGNALS TO DANGER WHERE A TRAIN STOPS OR REMAINS AT A SIGNAL**

- this instruction applies if you need to replace a stop signal to Danger after:



## 5.0 WORKING OF SIGNALS

- it has been cleared for a train to start or restart, or
- a train has stopped at a signal which is cleared having been replaced to Danger
- after replacing the signal to Danger, you must not allow any obstruction of the line ahead or alter the points until you have ensured that the Driver is aware of the signal

### 5.13 CLEARANCE OF SIGNALS WHEN YOU REQUIRE TO SPEAK TO THE DRIVER

- this instruction applies if you need to stop the train at the signal box in order to speak to the Driver
- you must not clear the signal in rear of the signal box until the train has nearly stopped at it
- you must then exhibit a red handsignal outside the signal box until the train stops there
- you must not then authorise the train to proceed until the Driver clearly understands what is required
- when the train may proceed, you must exhibit a handsignal as follows:
  - yellow handsignal      - if a signal is to be passed at Danger or an unsignalled wrong direction movement is to be made
  - green handsignal      - in all other circumstances

## **5.0 WORKING OF SIGNALS**

- if you need to speak to the Driver of another locomotive you may authorise the Driver to draw forward
- you must not then give the required handsignal until the train can proceed

## **6.0 TRAINS OR VEHICLES DETAINED ON RUNNING LINES AND USE OF REMINDER APPLIANCES**

### **6.1 TRAINS OR VEHICLES DETAINED ON RUNNING LINES**

- the Driver or Shunter is required to remind you of trains or vehicles detained on running lines as shown in Rule Book, Section K
- you must promptly answer calls from signal-telephones or train-radio
- briefly explain the delay
- instruct the Driver or Shunter to remain at the signal
- use the words "WAIT FOR THE SIGNAL"
- you must use reminder appliances as shown in Instruction 6.2
- if the Driver or Shunter comes to the signal box, you must ensure that this person immediately makes and signs an entry in the Train Register
- check that the entry correctly says:
  - “..... train detained
  - on ..... line
  - at ..... signal”
- countersign the entry
- then, ensure that this person leaves the signal box immediately

## **6.0 TRAINS OR VEHICLES DETAINED ON RUNNING LINES AND USE OF REMINDER APPLIANCES**

### **6.2 WHEN REMINDER APPLIANCES MUST BE USED**

- you must use a reminder appliance(s) on the signal control device(s) which operate(s):
  - signals protecting trains or vehicles detained or left on a running line where track circuits are not provided
  - home signals at which trains or vehicles are detained or left where track circuits are not provided
  - signals protecting a portion of line over which the normal passage of trains or certain trains is stopped
  - signals protecting a portion of line over which trains may pass only after the Driver has been cautioned or given instructions
  - any signalling or level crossing equipment which is disconnected or defective
- in the case of trains or vehicles which cannot be relied on to operate track circuits, you must use a reminder appliance(s) as shown above, whether or not track circuits are provided
- you must also use a reminder appliance(s) in connection with signalling equipment or equipment at a manned level crossing during the time when it must not be operated or must be kept in a particular position in accordance with the Rules
- where provided, you must additionally use any special equipment to indicate limits of a possession
- on Electric Token Block lines, you must use the token instrument reminders (where provided) when trains or vehicles are detained or left at the home signal or within the clearing point

## **6.0 TRAINS OR VEHICLES DETAINED ON RUNNING LINES AND USE OF REMINDER APPLIANCES**

### **6.3 HOW REMINDER APPLIANCES MUST BE USED**

- you may remove the reminder appliance in order to operate the signal control device when:
  - a signal is to be cleared for an unaffected route, or
  - a movement is to proceed after the Driver has been cautioned or instructed as necessary
- you must, however, immediately replace it after the signal control device has been operated
- in all other circumstances, you must not remove the reminder appliance until normal working can resume
- when not in use, reminder appliances must be kept in a suitable place and not left on spare levers or on the signalling control panel, etc

## **7.0 MOVEMENTS TO ENTER AN OCCUPIED SECTION**

### **7.1 WHERE THIS INSTRUCTION APPLIES**

- this instruction applies to any portion of a running line between two signals worked from the same signal box, except when the line is under Absolute Possession

### **7.2 INSTRUCTIONS TO BE OBSERVED**

- you must not permit a train or movement to enter an occupied section (as described above) except when:
  - a shunting movement (which is to attach, detach or remove vehicles) is to be made on the authority of a position light aspect or shunt signal, or

## 7.0 MOVEMENTS TO ENTER AN OCCUPIED SECTION

- a passenger train or an empty coaching stock train or a light locomotive is to enter an occupied platform line on the authority of a call-on aspect signal
- you must not permit a train or movement as shown above to enter an occupied section while a movement of the first train is taking place or has been authorised, until it has passed clear of the section or it has again stopped
- similarly, after authorising any train or movement to enter an occupied section, you must not permit any movement of the first train until the second train or movement has stopped, or sufficient time has elapsed for this to be the case

## 8.0 WORKING DURING SEVERE WEATHER

### 8.1 DURING POOR VISIBILITY

- when visibility is less than 200 metres (200 yards), you must observe the instructions applicable during fog or falling snow
- during fog or falling snow, you must also (where practicable) place one detonator on the rail when maintaining a semaphore signal at Danger in order to stop a train

### 8.2 DURING SEVERE FROST

- during severe frost, you must frequently operate mechanically worked signalling equipment which is vital to traffic movement
  - but only when the section is clear and no trains are signalled

### 8.3 DURING FALLING SNOW

- during falling snow, you must, if necessary, arrange for signal lights to be cleared of snow

**NOTE:** until this has been done, trains must be accepted during darkness only in accordance with acceptance conditions applicable during fog or falling snow

## **8.0 WORKING DURING SEVERE WEATHER**

- you must send for staff to undertake snow clearance duties as necessary

### **8.4 DURING STORMS, ETC**

- after a thunderstorm and occasionally during gales or blizzards, you must arrange with the other Signalman for a Token to be withdrawn and replaced at each end of the section on an Electric Token Block line

## **9.0 DRIVERS INADVERTENTLY PASSING SIGNALS AT DANGER**

### **9.1 IMMEDIATE ACTION**

- you must take immediate action in accordance with the Train Signalling Regulations to prevent danger arising
- if practicable, do not allow any other train to approach the signal which has been passed at Danger until you have ascertained the circumstances

### **9.2 AFTER THE TRAIN HAS BEEN STOPPED**

- tell the Driver as quickly as possible that a signal has been passed at Danger
- ascertain whether there is any possibility of a defect or irregularity affecting the signalling equipment and, if so, take the appropriate action
- treat any signal as defective if there is doubt as to its correct operation
- check whether the train has stopped safely and it is safe to resume normal working on the other line(s)

## **9.0 DRIVERS INADVERTENTLY PASSING SIGNALS AT DANGER**

- obtain from the Driver the necessary details to enable the incident to be investigated
- before authorising any further movement, you must obtain the Operating Officer's permission for the train to restart
- provided it is safe and practicable to do so, you may then authorise the Driver to proceed to the next stop signal if the train has stopped in the section
- you must observe the provisions of Rule Book, Section D, as if the Driver had been authorised to pass the previous signal at Danger
- normal working may then resume on the line concerned provided:
  - the signalling equipment is considered to be working correctly
  - there is no damage to points or crossings

## **9.3 OTHER ACTION TO BE TAKEN**

- tell the Signal Technician and Local Manager
- give details of any possibility that a defect or irregularity has occurred concerning the signalling equipment
- say whether any points have been run through (whether or not damage may have occurred)



## 10.0 IF POLICE ASSISTANCE IS REQUIRED

### 10.1 IF YOU NEED ASSISTANCE

- if you require such assistance, but it is not prudent to use a telephone, you must send the Police assistance urgently required signal (1-1-6) or special train description (1-16) to any adjacent signal box

### 10.2 IF ASSISTANCE IS NEEDED ELSEWHERE

- if you receive such a bell signal or description, you must immediately arrange for such assistance to be sent to the signal box concerned

## 11.0 SAFETY OF TRAIN CREW AND PERSONS RETRIEVING ITEMS FROM THE TRACK

### 11.1 WHEN THIS INSTRUCTION APPLIES

- when work is to be done on the outside of a train stopped on the running line because of a failure or exceptional incident but the Driver or Guard considers that this cannot be done safely with trains running on the adjacent line(s)
- when the person in charge requires trains to be stopped in order to retrieve a small item from the track

### 11.2 INSTRUCTIONS TO BE OBSERVED

- ascertain the exact location of the train and/or the line(s) on which train movements are to be stopped (or remain stopped)

## **11.0 SAFETY OF TRAIN CREW AND PERSONS RETRIEVING ITEMS FROM THE TRACK**

- agree a suitable margin for trains to be stopped (unless already stopped)
- make sure that the necessary signal protection is provided (including, where necessary, that to be provided by another Signalman)
- you must then give an assurance to the person requesting protection that normal working will not be resumed until that person informs you it is safe to do so
- remind that person of any adjacent line(s) remaining open to traffic
- A person in charge retrieving an item is required to stop trains on any line adjacent to a platform line
- the Driver or Guard is required to supplement the protection by use of a T-COD

## 11.0 SAFETY OF TRAIN CREW AND PERSONS RETRIEVING ITEMS FROM THE TRACK

### 11.3 TRAIN REGISTER ENTRIES

- you must enter in the Train Register the details of the arrangements, as follows:

Passage of trains stopped on:

\_\_\_\_\_ line between signal No. \_\_\_\_\_ and No. \_\_\_\_\_

\_\_\_\_\_ line between signal No. \_\_\_\_\_ and No. \_\_\_\_\_

at \_\_\_\_\_ (time) on \_\_\_\_\_ (date)

(\*) Agreed with Signalman at adjoining box at

\_\_\_\_\_ (time)

Confirmed to \_\_\_\_\_ (name)

of \_\_\_\_\_ (dept) at \_\_\_\_\_ (location)

Signature of Signalman \_\_\_\_\_

(\*) Noted by person making request (if present)

\_\_\_\_\_

**(\*) delete as necessary**

- the person requesting protection is required to countersign this entry
- where that person is unable to come to the signal box because of the distance involved, you must read out the entry to enable that person to ensure it is correct

## 11.0 SAFETY OF TRAIN CREW AND PERSONS RETRIEVING ITEMS FROM THE TRACK

### 11.4 WHEN NORMAL WORKING IS TO RESUME

- normal working may resume only when the person requesting protection confirms that it is safe to do so
- you must then make an entry in the Train Register as follows:

Confirmation received from \_\_\_\_\_ (name)

that normal working may now resume on:

\_\_\_\_\_ line between signal No. \_\_\_\_\_ and No. \_\_\_\_\_

\_\_\_\_\_ line between signal No. \_\_\_\_\_ and No. \_\_\_\_\_

at \_\_\_\_\_ (time) on \_\_\_\_\_ (date)

(\*) Signalman at adjacent box advised at \_\_\_\_\_ (time)

Signature of Signalman \_\_\_\_\_

(\*) Noted by person confirming normal working to apply  
(if present) \_\_\_\_\_

**(\*) delete as necessary**

- the person who requested protection is also required to countersign this entry, as shown in Instruction 11.3

## **11.0 SAFETY OF TRAIN CREW AND PERSONS RETRIEVING ITEMS FROM THE TRACK**

## **11.0 SAFETY OF TRAIN CREW AND PERSONS RETRIEVING ITEMS FROM THE TRACK**

## **12.0 SIGNALLING OF TRAINS WHICH CANNOT BE RELIED ON TO OPERATE TRACK CIRCUITS**

### **12.1 WHEN THIS INSTRUCTION APPLIES**

- during the movement of any Engineer's on-track machines or inspection cars on lines not under Absolute Possession
- during the movement of such a machine(s) when hauled by a locomotive or when formed as the last vehicle(s) of a freight train
- when a train includes a vehicle with a defective Track Circuit Assistor (see Instruction 13) AND the defect affects the first or last vehicle

### **12.2 GENERAL INSTRUCTIONS**

- you must not rely on these movements to operate track circuits
- the Driver or Operator is required to tell you before any such movement starts

### **12.3 INSTRUCTIONS ON TRACK CIRCUIT BLOCK LINES**

- you must not permit any train to follow a movement as described above until that movement has:
  - passed beyond the overlap of a stop signal ahead which has been controlled to Danger, or
  - entered a loop, siding or dead-end platform line
- you must set all points locked by track circuits for the passage of the movement
- on a route setting panel, you must use the individual point switches

## 12.0 SIGNALLING OF TRAINS WHICH CANNOT BE RELIED ON TO OPERATE TRACK CIRCUITS

- Automatic Route Setting (where provided) must be cancelled
- reminder appliances must be used
- you must instruct the Driver of the movement to report its progress as follows:
  - on arrival at or after passing beyond a location ahead of the relevant signal overlap, or
  - when in clear at a loop or siding, or
  - on arrival at a dead-end platform line
- tell the Driver to use train-radio or any convenient lineside or signal-telephone for this purpose
- after the movement has entered a portion of line where these arrangements apply and until it has passed clear, you must not:
  - permit any train to follow, cross, foul or converge from the opposite direction onto any portion of the line concerned
  - move any points within that portion of line

**NOTE:**    **an assisting train may, if necessary, enter the section in accordance with the Train Signalling Regulations**

- where necessary, you must agree these arrangements with any other Signalman involved



## **12.0 SIGNALLING OF TRAINS WHICH CANNOT BE RELIED ON TO OPERATE TRACK CIRCUITS**

### **12.4 INSTRUCTIONS ON NON-TRACK CIRCUIT BLOCK LINES**

- the movement may be signalled normally except as shown below
- you must not accept the movement if it would be detained at a signal which is out of sight in rear of your signal box unless a signal-telephone is provided
- you must not allow the movement to pass beyond your view to await clearance of the section signal (whether or not track circuits are provided)
- take particular care when movements are made within station limits where track circuits are provided

### **12.5 LEVEL CROSSINGS**

- you must caution the Driver in respect of any automatic level crossing (as shown in Instruction 30) and take similar action in respect of any barrow crossing with white light indications
- the auto-lower and auto-raise facility must not be used at any CCTV level crossing
- you must warn any Crossing Keeper at a CCTV crossing of the approach of the movement

### **12.6 TRAIN REGISTER ENTRIES**

- you must note the circumstances and the arrangements made (including any advice received from another Signaller)

## **13.0 SIGNALLING OF TRAINS WITH DEFECTIVE TRACK CIRCUIT ASSISTORS (TCA)**

### **13.1 IF A DEFECT OCCURS DURING A JOURNEY**

- the Driver is required to:
  - check whether the first or last vehicle is affected
  - advise you of the circumstances
- make certain that a controlled signal(s) is placed to Danger to protect the train until the nature of the defect is established

**NOTE:** restrictions on the working of trains with defective TCAs are shown in Rule Book, Section H, clause 3.6

### **13.2 IF THE DEFECT AFFECTS THE FIRST OR LAST VEHICLE**

- the train must not be relied on to operate track circuits
- you must signal the train forward in accordance with Instruction 12

### **13.3 IF THE DEFECT DOES NOT AFFECT THE FIRST OR LAST VEHICLE**

- the train may be signalled forward normally

## **14.0 DEFECTS OR IRREGULARITIES AFFECTING THE NORMAL OPERATION OF TRAINS**

### **14.1 IF A TRAIN IS UNABLE TO CONTINUE NORMALLY**

- you must inform Operations Control immediately if the Driver advises you of any defect or irregularity resulting in the train not being able to continue at the normal speed and/or not being able to remain in service in the normal way
- this includes any of the failures or irregularities described in Rule Book, Section H, clause 3.6
- if the train is to continue its journey at reduced speed, you must also inform the Signalman in advance

**NOTE:** if you receive such advice from another Signalman, you must pass this forward as necessary

### **14.2 IF A HEAD OR MARKER LIGHT IS DEFECTIVE**

- if a train is proceeding with the headlight not illuminated, you must arrange for the Driver to be informed as quickly as possible
- use train-radio or, if necessary, arrange for the train to be stopped
- if there is any other irregularity concerning marker lights, you must arrange for the Driver to be informed by the quickest means not involving delay to the train

## **14.0 DEFECTS OR IRREGULARITIES AFFECTING THE NORMAL OPERATION OF TRAINS**

### **14.3 IF SPEED RESTRICTION EQUIPMENT IS DEFECTIVE OR MISSING**

- if informed of the failure of any light in the equipment provided in connection with a temporary or emergency speed restriction, or of the absence of any such equipment which should be provided, you must:
  - warn the Driver of each approaching train
  - do this by train-radio or stopping the train as necessary
  - arrange for the equipment to be put in order
  - continue warning Drivers until the equipment is in order
- where appropriate, you must inform the Signaller at the next signal box so that these instructions can be applied from there

### **14.4 IF AN EMERGENCY SPEED RESTRICTION IS IMPOSED**

- you must stop each train approaching the restriction and tell the Driver
- do this until you are told that the required Handsignaller and/or equipment have been provided
- if the restriction is more severe than 40 kmh (25 mph), do this until you are told that the necessary information has been posted for 24 hours at each depot concerned

## 14.0 DEFECTS OR IRREGULARITIES AFFECTING THE NORMAL OPERATION OF TRAINS

### 14.5 IF THE AUTOMATIC WARNING SYSTEM (AWS) IS DEFECTIVE

- if informed by the Driver that an incorrect or no AWS indication was given where an AWS WARNING indication should be received, you must:
  - if practicable, advise the Driver of the following train approaching the signal or speed restriction concerned that the AWS may be defective
  - advise the Drivers of subsequent trains similarly until confirmation is received that the AWS track equipment is functioning correctly
  - advise Operations Control
- if informed by the Driver that an incorrect or no AWS indication was given where an AWS CLEAR indication should be received, you must advise Operations Control (and subsequently say if successive and similar failures occur at the signal concerned)

**REMINDER:** you must also advise the Signal Technician of any reported AWS failure (but you must point out if the Driver subsequently reports that successive and similar failures are occurring on the traction unit concerned)

### 14.6 IF AN IRREGULARITY OCCURS CAUSING AN INTERVENTION OF THE TRAIN PROTECTION WARNING SYSTEM (TPWS)

- if an irregularity may have occurred resulting in a TPWS intervention, you must:
  - ascertain from the Driver what has happened

## **14.0 DEFECTS OR IRREGULARITIES AFFECTING THE NORMAL OPERATION OF TRAINS**

- advise Operations Control
- obtain permission to authorise the train to proceed
- if however, a signal has been passed at Danger, you must observe Instruction 9

### **14.7 IF THE TRAIN PROTECTION AND WARNING SYSTEM (TPWS) IS DEFECTIVE**

- if a right-side failure occurs (causing unnecessary brake applications), you must arrange for the Driver of each approaching train to be stopped at the signal in rear and be advised of the circumstances
- if the failure affects the TPWS Train Stop, the Driver must be told to stop at the signal concerned (even if cleared) and to override the TPWS
- if a wrong-side failure occurs, you must treat the signal concerned as defective
- if possible, you must clear the signal before allowing any train to approach
- otherwise, you must arrange for the Driver of each approaching train to be stopped at the signal in rear and be instructed to approach cautiously the signal concerned which may be worked in the normal way
- if, however, the Driver reports that the TPWS equipment has failed when tested or that spurious TPWS interventions are occurring in service, it must be assumed that the train equipment is defective
- in all circumstances, you must advise Operations Control of the failure and obtain permission to authorise the train to proceed

## 14.0 DEFECTS OR IRREGULARITIES AFFECTING THE NORMAL OPERATION OF TRAINS

**REMINDER:** you must also advise the Signal Technician of any reported TPWS failure in service (but you must point out if the Driver subsequently reports that successive failures are occurring on the traction unit concerned)

### 14.8 IF THE TRAIN-RADIO IS DEFECTIVE

- the Driver is required to use a portable radio if the train-radio becomes defective and to proceed cautiously until a portable radio can be obtained
- the Driver will inform you when these circumstances apply (and you must inform Operations Control accordingly)
- you must record in the Train Register the locations and times at which the Driver reports that:
  - the train-radio has become defective
  - a portable radio has been obtained

## 15.0 FLOODING OF THE LINE

### 15.1 INSTRUCTIONS TO BE OBSERVED

- if the Driver reports that the line is flooded, you must:
  - inform Operations Control who will arrange for the Civil Engineering staff to attend the site to ascertain the depth of flood water and whether the formation is affected
  - consider the flooding as an obstruction of the line until advised that the passage of trains may be resumed (at normal or reduced speed)

## 16.0 NOT USED

## 17.0 SHUNTING OPERATIONS

### 17.1 WORKING OF POINTS DURING SHUNTING OPERATIONS

- you must not operate points where shunting may be taking place unless you have reached a clear understanding with the Shunter (or Driver when not accompanied by a Shunter) as to what is to be done
  - before an unsignalled movement is made over the points worked from your signal box, the Shunter (or Driver if unaccompanied) is required to obtain your permission
  - this permission must be given verbally
- 
- where necessary, the Shunter (or Driver when not accompanied by a Shunter) will tell you when the movement has passed clear of points which require to be moved



## **17.0 SHUNTING OPERATIONS**

### **17.2 AFTER COMPLETION OF SHUNTING ON RUNNING LINES**

- you must ensure that the running line(s) is clear when shunting is finished
- if necessary, you must obtain an assurance from the Shunter or Driver that this is so

## **18.0 WORKING OF REVERSIBLY SIGNALLED LINES**

### **18.1 WHERE THIS INSTRUCTION APPLIES**

- on bi-directional lines which are designated as REVERSIBLE

### **18.2 WHEN REVERSIBLE WORKING MAY BE INTRODUCED**

- trains may be signalled in the reverse direction only in the following circumstances:
  - (a) when such working is shown in the Notice or Supplementary Notice
  - (b) when such working is necessary because of an obstruction of the line, a train failure, a signalling equipment failure or emergency engineering
- when (b) above applies, you must advise the Driver of the circumstances before clearing the signal controlling the entrance to the section in the reverse direction
- this arrangement must apply to each train but is not necessary after such working has applied for 48 hours
- you must also instruct the Driver of the first train through the section in the reverse direction (when (b) above applies) to proceed cautiously and stop where necessary to inform anyone on or near the line that reversible working applies

## **18.0 WORKING OF REVERSIBLY SIGNALLED LINES**

### **18.3 FAILURE OF SIGNALS**

- you must observe Track Circuit Block Regulation 11.3
- if, however, you are unable to clear the signal controlling the entrance to the section in the reverse direction AND the traffic direction indication cannot be obtained for that direction, you must arrange for Working by Pilotman to be introduced before authorising any movement in the reverse direction

### **18.4 FAILURE OF TRACK CIRCUITS**

- you must observe Track Circuit Block Regulation 11.4
- if it is necessary for a train to pass in the reverse direction, Working by Pilotman must first be introduced

### **18.5 PATROLMAN'S LOCKOUT DEVICE (PLOD)**

- the Patrolman is required to obtain your permission before operating the PLOD to LOCKOUT (or Patrol)
- before giving this permission, you must ensure that:
  - the protecting signals in the reverse direction are placed or maintained at Danger
  - any train in that direction has passed clear of the section concerned
- you must record in the Train Register:
  - the identity of the section concerned
  - the Patrolman's name and mobile telephone number
  - the time permission is given to operate the PLOD to LOCKOUT

## **18.0 WORKING OF REVERSIBLY SIGNALLED LINES**

- the Patrolman is required to tell you when patrolling is completed and the PLOD is restored to NORMAL (or traffic)
- you must endorse the Train Register entry accordingly together with the time
- if it is absolutely necessary to introduce reversible working while a PLOD is at LOCKOUT, you must contact the Patrolman, using the mobile telephone if necessary
- tell the Patrolman to restore the PLOD to NORMAL (or traffic) as soon as possible to enable reversible working to be introduced

## **19.0 BRIDGE STRIKES**

### **19.1 WHEN THIS INSTRUCTION APPLIES**

- when a road vehicle strikes an overbridge or underbridge and the consequences have the potential to endanger trains
- this instruction still applies even though trains may have passed normally over or under the bridge since the reported time of incident
- this instruction does not apply to the unaffected structure(s) where the railway passes over the road on two or more adjacent but separate structures

### **19.2 IF ADVISED OF A BRIDGE STRIKE**

- you must immediately stop the passage of trains on each affected line and advise Operations Control
- normal working must not then resume until authorised by the Civil Engineer's Bridge Engineer

## **19.0 BRIDGE STRIKES**

### **19.3 INTERIM ARRANGEMENTS**

- pending the arrival of the Bridge Engineer a specially authorised Nominated Person (NP) may be sent to the site to establish whether the damage is apparently superficial
- if the NP advises you that this is the case, trains may be authorised to pass the site at 8 kmh (5 mph) until the Bridge Engineer authorises normal working
- if the NP (who is required to remain at the site) later advises you that further damage is occurring, the passage of trains must again be stopped

## **20.0 OPERATION OF SIGNALS, POINTS AND TRACK CIRCUITS**

### **20.1 USE OF LEVERS**

- make sure that levers are secured in the normal or reverse position by the catch being firmly down in the notch of the frame
- use the signal wire adjusters as necessary

### **20.2 OPERATION OF POINTS AND SIGNALS**

- check that points and signals respond correctly to the operation of signal control devices
- do this by direct observation or by checking the indicators or repeaters provided
- from time to time operate points which are rarely used to check that they are still in order

## **20.0 OPERATION OF SIGNALS, POINTS AND TRACK CIRCUITS**

### **20.3 OBSERVATION OF TRACK CIRCUIT INDICATIONS**

- as far as practicable, you must check that the correct track circuit indications are given during the passage of trains
- you must specially observe the operation of track circuits in the following circumstances:
  - during the passage of the first train after the line has been blocked in accordance with Rule Book, Section T, Parts 2 or 3
  - during the passage of the next train after an application of Sandite
  - when advised of leaf fall or other conditions which may affect the operation of track circuits
- you must also be alert for track circuit indications unexpectedly showing 'occupied' and immediately ascertain the cause

### **20.4 OPERATION OF SIGNALS EQUIPPED WITH SPAD INDICATORS**

- these signals are equipped with an override plunger which disables the SPAD indicator for four minutes
- when authorising the Driver to pass the signal at Danger, you must instruct the Driver to operate the plunger at the signal before proceeding
- if this authority is passed via a Handsignalman, Pilotman or other authorised person at the signal, you must instead instruct that person to operate the override plunger after giving the necessary instructions and before authorising the Driver to proceed

## 20.0 OPERATION OF SIGNALS, POINTS AND TRACK CIRCUITS

- if, however, the train is to pass the signal at Danger when it is intermediate during Temporary Block Working or in an Engineer's Possession, the Driver is permitted to proceed without operating the plunger and to disregard the SPAD indicator

## 20.5 OPERATION OF SIGNALS EQUIPPED WITH TRAIN PROTECTION AND WARNING SYSTEM (TPWS)

- you must remind the Driver that the signal(s) concerned is TPWS-fitted when authorising the Driver to:
  - pass one signal at Danger, or
  - pass two or more signals at Danger during Temporary Block Working where any signal is TPWS-fitted, or
  - pass at Danger the signal protecting an Engineer's Possession where that signal or any signal in the possession is TPWS-fitted, or
  - make an unsignalled wrong direction movement where any right direction signal is TPWS-fitted

## 21.0 ELECTRIC REPEATERS

### 21.1 BASIC PRINCIPLE

- if a repeater shows an indication not corresponding with the position of the signal control device, you must assume that the signal itself is wrong

**NOTE:** if it repeats the positions of two or more signals, you must assume each signal to be wrong

## 21.0 ELECTRIC REPEATERS

### 21.2 METHOD OF WORKING TO APPLY

- you may ONLY continue normal working if you can ascertain that the signal responds correctly to the operation of the signal control device
- otherwise, you must treat the signal(s) concerned as defective and you must not permit any train to approach the signal(s) except as shown in Rule Book, Section E, clause 3
- where the repeater indicates that the main filament (only) of a double filament lamp has failed, you may continue normal working

## 22.0 POINTS PROVIDED WITH FACING POINT LOCKS (FPL)

### 22.1 INSTRUCTIONS TO BE OBSERVED

- you must use FPLs for the passage of trains and, as far as practicable, for shunting movements
- where points must be correctly set before the Is line clear signal is acknowledged, you must not consider any facing points with FPLs as correctly set until they are locked

## 23.0 TRAP POINTS, DERAILERS AND WORKED CATCH POINTS

### 23.1 INSTRUCTIONS TO BE OBSERVED

- you must keep these in the required position to ensure safety except when a movement is required to pass over them
- you must arrange for worked catch points to be set and secured before you authorise any movement to start which will pass over them in the facing direction

## **24.0 NEW OR REDUNDANT POINTS**

### **24.1 WHEN THIS INSTRUCTION APPLIES**

- when new points are installed or partly installed, but not yet commissioned
- when redundant points are taken out of use but not fully removed

### **24.2 INSTRUCTIONS TO BE OBSERVED**

- such points may be regarded as plain line
- movements in either direction may take place without restriction
- when in position, the switch rails will be secured out of use in accordance with Engineering Instructions and the direction for which they are set will be shown in the Notice
- you will not normally be advised when new points are to be partly installed without the switch rails, or when redundant points are to be removed where the switch rails have previously been taken out

### **24.3 IF UNCONNECTED POINTS ARE TO BE MOVED**

- the Engineer's Inspector (only) may authorise the temporary removal of the securing arrangements if it is essential to move unconnected points when the line(s) is under possession
- the Inspector will tell you before the securing arrangements are removed and when they are restored
- you must record in the Train Register the times when these arrangements are made, together with the Inspector's name



## 25.0 ROUTINE TESTING OF SIGNALLING EQUIPMENT

### 25.1 ARRANGEMENTS TO BE MADE

- as soon as possible after opening the signal box, you must check that instruments, signals, points, etc are in working order
- where practicable, you must test indicators and alarms and, where provided, emergency bells between 10.00 and 11.00 daily
- when testing indicators or bells, you first send the Testing equipment, etc signal (16 consecutively)

**NOTE:** this must not be done when a train has been signalled

### 25.2 TRAIN REGISTER ENTRIES

- you must note in the Train Register whenever equipment is tested or telephone calls are made or received for test purposes

## 26.0 USE OF BLOCK TELEPHONES

### 26.1 INSTRUCTIONS TO BE OBSERVED

- you must not use these telephones in place of bell signals or train describers except as authorised in the Train Signalling Regulations
- when necessary to speak with adjacent Signalman, you must send the Answer telephone signal (1-1)

## **27.0 EQUIPMENT PROVIDED FOR THE RELEASE OF SIGNALLING CONTROLS**

### **27.1 SEALED RELEASES**

- these may be used only in connection with a track circuit failure and not for normal traffic purposes
- before using the release, you must check each time that the portion of line concerned is clear and no movement is about to take place over it
- immediately after initially using the release, you must:
  - inform the Signal Technician and the Local Manager
  - note the details in the Train Register
- arrangements must be made for the glass cover or seal of the apparatus to be replaced when normal working is to be resumed
- you must note in the Train Register when normal working resumes
- the Signal Technician is required to countersign this entry

### **27.2 MANUAL RELEASES**

- where manual releases are provided, you must use them only in accordance with the instructions issued at your signal box

## **28.0 SIGNALLING FAULT REPORT FORMS**

### **28.1 USE OF FORMS**

- you must use the appropriate Signalling Fault Report Forms to record all signalling equipment failures, including damage caused by a derailment or irregular working
- this applies whether or not train delays occur

## **28.0 SIGNALLING FAULT REPORT FORMS**

### **28.2 COMPLETION OF FORMS**

- these forms must be completed, signed and forwarded for any further attention as shown on the form

## **29.0 NOT USED**

## **30.0 LEVEL CROSSINGS - CAUTIONING OF TRAINS**

### **30.1 GENERAL INSTRUCTIONS**

- where reference is made in instructions concerning level crossings to trains to be cautioned, you must make the arrangements shown below

### **30.2 INSTRUCTIONS AT THE SUPERVISING OR CONTROLLING SIGNAL BOX**

- before clearing the protecting signal(s), you must instruct the Driver to approach the crossing cautiously and not pass over it without first ensuring it is safe to do so
- where a Crossing Keeper or Emergency Operator (EO) is on duty at the crossing, you must also instruct the Driver not to pass over the crossing unless authorised by that person
- in the case of an AHB or AHB-D crossing where an EO is not on duty, you must remind the Driver to 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 it
- where there is more than one level crossing in the section, you must take particular care to ensure that the Driver understands which crossing is involved

## **30.0 LEVEL CROSSINGS - CAUTIONING OF TRAINS**

- if a protecting signal(s) is controlled by another Signalman, you must request that Signalman to observe these instructions in respect of that signal(s)
- tell the other Signalman whether a Crossing Keeper or EO is on duty
- you must also inform that Signalman when normal working may resume
- if Single Line Working or Working of Single Lines by Pilotman applies, you must tell the Pilotman to give the necessary instructions to the Driver

### **30.3 INSTRUCTIONS AT THE NON-SUPERVISING SIGNAL BOX**

- you must observe the above instructions when requested to do so by the other Signalman
- do this until advised by that Signalman that normal working may resume

## **31.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS (AHB) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

### **31.1 TELEPHONE CALLS**

- you must immediately answer any telephone call from the crossing

### **31.2 LARGE, LOW OR SLOW MOVING VEHICLES OR ANIMALS**

- road users with large, low or slow moving vehicles or with animals are required to obtain your permission before using the crossing

## **31.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS (AHB) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

- before giving this permission, you must:
  - check with the road user how long the movement will take
  - obtain a sufficient margin between trains to avoid delays
  - ensure that the protecting signals are placed or maintained at Danger and any approaching train has passed clear of the crossing

**NOTE:** if you cannot immediately authorise the movement, tell the road user to wait and call again

- after giving this permission, you must not resume normal working until the road user informs you that the movement has passed clear
- if this information is not received, you must:
  - caution the next train to approach the crossing
  - if necessary, caution subsequent trains until information is received that the crossing is clear

## **31.3 ROUTINE ROAD MAINTENANCE**

- this instruction applies if you are told that routine road maintenance of short duration is to be done near the crossing

**NOTE:** this includes work affecting lighting, drains, hedges or ditches, etc and road sweeping or snow clearance

- you must arrange with the person supervising the work for this to be done during a suitable interval(s) between trains

## **31.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS (AHB) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

- you must make the same arrangements as shown in Instruction 31.2

## **31.4 WHERE A PROTECTING SIGNAL IS CONTROLLED BY ANOTHER SIGNALMAN**

- when it is necessary for protecting signals to be placed or maintained at Danger, you must obtain an assurance from the other Signalman that:
  - the signal(s) concerned is placed or maintained at Danger
  - there is no train approaching the crossing
- you must also inform that Signalman when normal working may resume

## **31.5 RECORDING OF TELEPHONE CALLS**

- you must record the following details of each call from the crossing:
  - name of crossing
  - time and nature of request
  - how long required
  - time permission given for movement or routine road maintenance to take place
  - time movement clear or maintenance completed/stopped OR time first train cautioned if this advice is not received

## **31.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS (AHB) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

### **31.6 OPENING AND CLOSING OF SIGNAL BOX**

- you must not close the signal box when any line over the crossing is under Absolute Possession unless:
  - an Emergency Operator is on duty at the crossing, or
  - arrangements have been made to ensure that no movements will come within the crossing controls
- after closing the signal box, you must immediately operate the absent switch or line status equipment (LSE), where provided
- on an Electric Token Block line, you must obtain a Token for the section concerned and place it in the LSE
- after re-opening the signal box, you must operate the absent switch or restore the LSE to the NORMAL position and, on an Electric Token Block line, restore the Token to the instrument

**NOTE:** the LSE equipment must not be used during a failure of the level crossing equipment or when an Emergency Operator is on duty at the crossing

### **31.7 ROUTINE MAINTENANCE OF CROSSING EQUIPMENT**

- the Signal Technician will obtain your permission before starting routine maintenance work which will interfere with the normal operation of the crossing
- before giving this permission you must:
  - agree a suitable margin between trains

### **31.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS (AHB) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

- ensure that the protecting signals are placed to Danger and any approaching train has passed clear of the crossing
- after giving this permission, you must maintain the protecting signals at Danger until the Technician advises that the normal working may resume
- if requested by the Technician, you must arrange for the first train in each direction to be cautioned

### **31.8 FAILURE OF CROSSING EQUIPMENT OR PROLONGED OCCUPATION OF TRACK CIRCUITS**

- if any telephone at the crossing fails, you must arrange for trains to be cautioned until the defect is rectified
- if a failure of the mains power supply is indicated, you must:
  - inform the Signal Technician
  - ascertain from the Technician whether/when the crossing must be locally controlled
- if you become aware (by whatever means) that any of the following have occurred, you must treat the crossing equipment as failed:
  - the road traffic signals are not operating correctly
  - the barriers (at an AHB crossing) are not fully raised or the road traffic signals are operating when no train is approaching
  - a controlling track circuit is occupied by a disabled train



## **31.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS (AHB) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

- you must then:
  - immediately arrange for the appointment of an Emergency Operator (EO) at the crossing
  - tell any road user delayed by the illumination of the road traffic signals or the barriers (at an AHB crossing) being lowered to wait until the EO arrives or to take another route avoiding the crossing
  - instruct the Driver or Guard of any disabled train occupying a controlling track circuit(s) not to make any further movement until authorised

**REMINDER:**      **you must inform the Technician of any failure of the road traffic signals or barriers**

## **31.9 APPOINTMENT OF AN EMERGENCY OPERATOR (EO)**

- you must immediately arrange for the appointment of an EO to take local control of the crossing if:
  - an equipment failure occurs affecting the normal operation of the crossing, or

### 31.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS (AHB) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)

- a train becomes disabled within the crossing controls, or
- a road traffic accident occurs or emergency roadworks are to start which may affect the normal traffic flow
- in the above circumstances, you must arrange for the cautioning of trains which are to pass over the crossing before local control is taken
- in the following circumstances, you must ensure that an EO has taken local control of the crossing before any of the following are authorised to start:
  - other roadworks which may affect the normal traffic flow
  - signalling work (other than routine maintenance) which will affect the normal operation of the crossing
  - an unsignalled movement in the wrong direction (\*)
  - Single Line Working (\*)
  - the movement of a trolley which will bring it within the crossing controls
  - a train movement which is to stop in the section
  - an Absolute Possession of any line over the crossing unless arrangements are made to ensure that all movements will pass normally over the crossing or no movements will come within the crossing controls

**Note:** (\*) not applicable where wrong direction controls are provided

## **31.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS (AHB) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

### **31.10 WHEN AN EMERGENCY OPERATOR (EO) IS ON DUTY**

- the EO will report to you when taking duty and again on arrival at the crossing
- you must tell the EO when to take local control
- before doing this, you must ensure that:
  - the protecting signals are at Danger
  - any approaching train which has not been cautioned has passed clear
  - the Driver of any disabled train within the crossing controls has been instructed not to proceed until authorised
- you must advise the EO of the approach of each train in sufficient time to enable the crossing to be closed to road traffic before the train arrives
- you must tell the EO when normal working may resume
- before doing this you must ensure that:
  - there is no train approaching the crossing

### **31.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS (AHB) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

- any train which has passed over the crossing has also passed well clear of the controls in either direction
- before authorising the EO to leave the crossing, you must check that:
  - the crossing is reset for automatic working
  - the normal indications are obtained showing that the crossing is working correctly
- you must note in the Train Register the times at which:
  - the EO reports for and leaves duty
  - the EO arrives at and leaves the crossing
  - local control is taken and given up

### **32.0 AUTOMATIC HALF-BARRIER LEVEL CROSSINGS, DISTANT MONITORED (AHB-D) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

- the instructions applicable at AHB crossings (see Instruction 31) also apply at AHB-D crossings

### **33.0 LEVEL CROSSINGS WITH MINIATURE RED AND GREEN WARNING LIGHTS (ML OR MWL) (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

#### **33.1 LARGE, LOW OR SLOW MOVING VEHICLES OR ANIMALS**

- where a telephone is provided, any person with a large, low or slow moving vehicle or with animals is required to obtain your permission before using the crossing
- you must then observe the instructions for such movements at AHB crossings (see Instructions 31.2, 31.4 and 31.5)

#### **33.2 FAILURE OF TELEPHONE**

- if any telephone at the crossing fails, you must arrange for trains to be cautioned until the defect is remedied

#### **33.3 WRONG DIRECTION MOVEMENTS**

- before authorising the movement you must instruct the Driver to:
  - approach cautiously and stop short of the crossing
  - sound the horn
  - ensure that it is safe to do so before passing over the crossing

## **34.0 OCCUPATION OR ACCOMMODATION LEVEL CROSSINGS WHERE A TELEPHONE IS PROVIDED FOR THE USER (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

### **34.1 TELEPHONE CALLS**

- any person with a vehicle or with animals is required to telephone you before using the crossing
- you must ascertain:
  - what is required to pass over the crossing
  - how long it will take

### **34.2 LARGE, LOW OR SLOW MOVING VEHICLES OR ANIMALS**

- you must then observe instructions for such movements at AHB crossings (see Instructions 31.2 and 31.4)
- you must additionally record in the Train Register the numbers of the protecting signals which are placed or maintained at Danger

### **34.3 OTHER VEHICLES**

- provided the crossing movement does not comprise a vehicle as shown above, you must:
  - check if there is sufficient time for the crossing to be used before the next train will pass over it
  - if so, tell the user to cross immediately
  - if not, tell the user to wait and call again

### **34.0 OCCUPATION OR ACCOMMODATION LEVEL CROSSINGS WHERE A TELEPHONE IS PROVIDED FOR THE USER (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

**NOTE:** this instruction also applies at crossings where a contact telephone number is provided for the user

#### **34.1 TELEPHONE CALLS FROM CROSSING USER**

- if a crossing user contacts you for permission to cross the following applies

#### **34.2 GIVING PERMISSION TO USE THE CROSSING**

- before giving this permission, you must:
  - unless already stated or the call originates from a dedicated line, ask the user to confirm the crossing ID number
  - find out from the crossing user how long the movement will take
  - check that any approaching train has passed clear of the crossing and that there is enough time between trains to avoid delays
  - only use track circuits to determine the position of the trains
  - ensure that the protecting signals of the crossing are placed or kept at Danger and the necessary Reminder Appliances have been applied
- when giving this permission, you must tell the crossing user  
"CROSS IMMEDIATELY AND TELEPHONE BACK TO CONFIRM YOUR MOVEMENT IS COMPLETE"
- after giving this permission, you must not resume normal working until the crossing user has done this
- if the crossing user does not telephone again, you must:
  - caution the next train to approach the crossing
  - if necessary, caution subsequent trains until information is received that the crossing is clear and the gates are closed

### **34.3 IF UNABLE TO GIVE PERMISSION TO USE THE CROSSING**

#### **34.3.1 On Double Lines**

- if you cannot immediately authorise the movement, tell the crossing user  
“NEGATIVE, WAIT AND TELEPHONE AGAIN.”

Where you think it is beneficial you can advise the user why permission cannot be given.

- you must not give permission to the crossing user to use the crossing until your signal panel indicates that any approaching train has passed clear of the crossing

#### **34.3.2 On Single Lines**

- if you cannot immediately authorise the movement, tell the crossing user  
“NEGATIVE, WAIT AND TELEPHONE AGAIN.”

Where you think it is beneficial you can advise the user why permission cannot be given.

- if, however, the crossing user calls again and tells you that the train has passed, you must ask:  
“CAN YOU CONFIRM THAT YOU SAW THE TRAIN PASSING OVER THE CROSSING WHILE YOU WERE AT IT?”
- if the crossing user can confirm this, you may give permission to use the crossing as described in 34.2

### **34.4 SAFETY CRITICAL COMMUNICATIONS**

- trains must be cautioned if you are not satisfied that the call has been understood. The caution can be relayed to Train Drivers via the train radio

### **34.5 RECORDING OF TELEPHONE CALLS**

- you must record the details of each call from the crossing using the system provided at your Signal Box

### **34.6 FAILURE OF TELEPHONE**

- if a telephone at the crossing fails, you must arrange for trains to be cautioned until the defect is remedied



**34.7 USE OF CROSSINGS WITHIN A POSSESSION**

The PICOP will not allow any rail movements over the crossing before ascertaining that it is safe to do so

If the engineering work is on the approach to or over the crossing the PICOP will appoint an attendant to manage any requests to cross over the crossing

When a user calls to cross at a level crossing within a possession tell the user

“CROSS IMMEDIATELY AND TELEPHONE BACK TO CONFIRM YOUR MOVEMENT IS COMPLETE”

if the crossing user does not telephone again, you must:

- caution the next train to approach the crossing or advise the PICOP
- if necessary, caution subsequent trains until information is received that the crossing is clear and the gates are closed

## **34.0 OCCUPATION OR ACCOMMODATION LEVEL CROSSINGS WHERE A TELEPHONE IS PROVIDED FOR THE USER (INSTRUCTIONS AT THE SUPERVISING SIGNAL BOX)**

### **34.4 RECORDING OF TELEPHONE CALLS**

- you must record the details of each call from the crossing as shown in Instruction 31.5

### **34.5 FAILURE OF TELEPHONE**

- if a telephone at the crossing fails, you must arrange for trains to be cautioned until the defect is remedied

## **35.0 LEVEL CROSSINGS - INSTRUCTIONS TO SIGNALMEN AT NON-SUPERVISING SIGNAL BOXES**

### **35.1 WHEN THIS INSTRUCTION APPLIES**

- this instruction applies at the signal box at the opposite end of the section or block section to the signal box supervising any automatic level crossing or any occupation or accommodation level crossing provided with a telephone

### **35.2 WHEN PROTECTING SIGNAL(S) TO BE KEPT AT DANGER**

- the Signaller at the supervising signal box will tell you when it is necessary for protecting signals to be placed or maintained at Danger
- you must tell the other Signaller when this has been done and no train is approaching the crossing
- you must not then allow any train to approach the crossing until the other Signaller advises that normal working may resume (or trains are to be cautioned)

## **35.0 LEVEL CROSSINGS - INSTRUCTIONS TO SIGNALMEN AT NON-SUPERVISING SIGNAL BOXES**

### **35.3 WHEN TRAINS ARE TO BE CAUTIONED**

- the Signalman at the supervising signal box will tell you when it is necessary for trains to be cautioned
- you must then observe Instruction 30

### **35.4 WHEN A WRONG DIRECTION MOVEMENT IS TO BE MADE OVER THE CROSSING**

- before authorising an unsignalled wrong direction movement which will pass over an AHB, AHB-D or LB crossing, you must obtain an assurance from the Signalman at the supervising signal box that the crossing is under local control

**REMINDER:**      **when authorising any such movement over any automatic level crossing, you must observe the requirements of Rule Book, Section D, clause 4**

## **36.0 NOT USED**

## **37.0 LEVEL CROSSINGS SUPERVISED BY CLOSED CIRCUIT TELEVISION (CCTV)**

### **37.1 OPERATION OF BARRIERS**

- the barriers must normally be kept raised
- you must ensure that the barriers are operated without delaying trains
- normally, the barriers should be operated with the initiation switch at AUTO

## **37.0 LEVEL CROSSINGS SUPERVISED BY CLOSED CIRCUIT TELEVISION (CCTV)**

- this switch must be placed to MANUAL if:
  - automatic initiation is not possible because of a failure of signalling or level crossing equipment or prolonged occupation of the controlling track circuits
  - road traffic congestion occurs
  - an exceptional movement is to pass over the crossing
  - any of the following is to pass over the crossing or come within the crossing controls:
    - \* an unsignalled movement
    - \* a movement required to stop in section
    - \* a movement which cannot be relied on to operate track circuits (including a trolley)
- before operating the CROSSING CLEAR control (whether AUTO or MANUAL initiation applies), you must:
  - check that the barriers are fully lowered
  - ensure that the crossing is clear
- when MANUAL initiation applies, you must raise the barriers as soon as the indication is given that the train has passed clear (and no other train is approaching)
- make sure that the train is complete (and is well clear in the case of a movement which cannot be relied on to operate track circuits) and no other train is to pass before raising the barriers

## **37.0 LEVEL CROSSINGS SUPERVISED BY CLOSED CIRCUIT TELEVISION (CCTV)**

### **37.2 EMERGENCIES**

- if an emergency occurs which could endanger road users, you must immediately lower the barriers and take any other appropriate action
- if an emergency occurs at the crossing, you must arrange for trains to be stopped in accordance with the Train Signalling Regulations

### **37.3 FAILURES**

#### **37.3.1 Failure to obtain a satisfactory CCTV picture of the crossing**

- you must arrange for an Attendant to be provided at the crossing
- in the interim, you must tell the Driver of any train detained at the protecting signal to instruct the Guard to proceed to the crossing and contact you from there
- you must then observe the instructions shown below except that the assurance that the barriers are fully lowered and the crossing is clear must be obtained from the Guard
- after the arrival of the Attendant at the crossing, you must:
  - maintain the initiation switch at MANUAL
  - tell the Attendant on each occasion when the barriers are to be lowered
  - stay in contact with the Attendant during the lowering sequence and obtain an assurance that:
    - \* the barriers are fully lowered
    - \* the crossing is clear

## **37.0 LEVEL CROSSINGS SUPERVISED BY CLOSED CIRCUIT TELEVISION (CCTV)**

- then operate the CROSSING CLEAR controls to enable the protecting signal to be cleared

### **37.3.2 Failure of barriers in the lowered position**

- you must arrange for an Emergency Operator (EO) to be provided at the crossing as soon as possible
- in the interim, trains may be signalled normally if the road traffic signals are working
- otherwise, you must authorise the Driver of each train to pass the protecting signal at Danger as shown in Instruction 37.4
- the initiation switch must be maintained at MANUAL during the failure

### **37.3.3 Failure of barriers in the raised position**

- you must arrange for an EO to be provided at the crossing as soon as possible
- in the interim, you must not authorise any movement over the crossing

### **37.3.4 Failure or prolonged occupation of controlling track circuits**

- you must consider the barriers as having failed in the lowered position and observe Instruction 37.3.2
- in addition, you must remind the Driver or Guard of any disabled train occupying a controlling track circuit that no further movement is to be made unless authorised by you

## **37.0 LEVEL CROSSINGS SUPERVISED BY CLOSED CIRCUIT TELEVISION (CCTV)**

### **37.3.5 Failure of power supply**

- you must advise the Signal Technician and ascertain whether an EO will need to be provided at the crossing

## **37.4 MOVEMENTS REQUIRED TO PASS A PROTECTING SIGNAL AT DANGER**

- before authorising the movement, you must:
  - check that the initiation switch is at MANUAL
  - ensure that the barriers are lowered and the crossing is clear
  - operate the CROSSING CLEAR controls
  - observe the provisions of Rule Book, Section D

## **37.5 WRONG DIRECTION MOVEMENTS OVER THE CROSSING**

- tell the Driver to stop opposite the protecting signal on the other line
- before authorising the movement to proceed further, you must ensure that:
  - the barriers are fully lowered
  - the crossing is clear
- if, however, an EO is on duty at the crossing (whether or not local control applies), you must:
  - authorise the Driver to proceed to the crossing without stopping at the protecting signal on the other line

## **37.0 LEVEL CROSSINGS SUPERVISED BY CLOSED CIRCUIT TELEVISION (CCTV)**

- instruct the Driver not to pass over the crossing unless authorised by a green handsignal exhibited there
- if the EO is present but the crossing is not under local control, you must ensure that:
  - the barriers are fully lowered
  - the crossing is clear
- you may then authorise the EO to exhibit a green handsignal at the crossing
- in all circumstances, you must observe the provisions of Rule Book, Section D

## **37.6 APPOINTMENT OF AN EMERGENCY OPERATOR**

- unless pre-arranged, you must immediately arrange for an EO to be appointed at the crossing if:
  - it is not possible to obtain a satisfactory CCTV picture of the crossing (see **Note 1**), or
  - a signalling or crossing equipment failure occurs affecting the normal operation of the crossing, or
  - an Absolute Possession of any line over the crossing is to be granted but only if the work will cause the operation of any controlling track circuit, or
  - a train authorised to stop in section will cause the operation of a controlling track circuit, or
  - Single Line Working is to apply (see **Note 2**), or
  - a mains power supply failure occurs and may last for an extended period



## **37.0 LEVEL CROSSINGS SUPERVISED BY CLOSED CIRCUIT TELEVISION (CCTV)**

**NOTE (1) - in these circumstances, the EO need only act (and be competent) as an Attendant**

**NOTE (2) - in these circumstances, the EO must have taken duty before the first train in the wrong direction is allowed to pass over the crossing**

### **37.7 WHEN AN EMERGENCY OPERATOR (EO) IS ON DUTY**

#### **37.7.1 When the EO arrives**

- the EO will report to you on arrival at the crossing

#### **37.7.2 Whether local control is to be continuous**

- in the light of the likely volume of road and rail movements, you must decide whether:
  - local control should be continuous, or
  - the barriers should remain lowered and local control taken only when road traffic is to pass
- you must instruct the EO accordingly

#### **37.7.3 When local control may be taken**

- you must not permit the EO to take local control unless:
  - the protecting signals are at Danger
  - the signal control devices are normalised
  - any approaching train has passed clear

## **37.0 LEVEL CROSSINGS SUPERVISED BY CLOSED CIRCUIT TELEVISION (CCTV)**

- exceptionally, you may permit local control to be taken when a disabled train (or an Engineer's train on a line under possession) is between the protecting signals and the crossing
- in the former case, you must first obtain from the Driver or Guard of the disabled train an assurance that no further movement will be made unless authorised by you

### **37.7.4 While local control applies**

- you must observe the following arrangements:
  - advise the EO of each approaching train
  - obtain an assurance from the EO that the barriers are fully lowered and the crossing is clear before you authorise the Driver to pass the protecting signal at Danger
  - you may, however, tell the EO to authorise the Driver to proceed over the crossing when the EO is satisfied that it is safe to do so in the case of:
    - \* an unsignalled movement in the wrong direction, or
    - \* a movement in either direction on a line under possession
  - in all circumstances, the EO will tell you when the train has passed over the crossing and obtain your permission to raise the barriers
  - do not give this permission if another train has been or is about to be authorised to pass over the crossing

## **37.0 LEVEL CROSSINGS SUPERVISED BY CLOSED CIRCUIT TELEVISION (CCTV)**

### **37.7.5 While the EO is on duty but local control does not apply**

- you must observe the following arrangements:
  - trains may be signalled normally over the crossing
  - you must, however, first check that the barriers are fully lowered and the crossing is clear before instructing the EO to authorise the Driver to pass over the crossing in the case of:
    - \* an unsignalled movement in the wrong direction, or
    - \* a movement in either direction on a line under possession

### **37.7.6 When local control is no longer required**

- tell the EO to lower the barriers and reset the apparatus for normal working

### **37.7.7 Before authorising the EO to leave**

- you must check that the barriers work correctly when operated from your signal box

### **37.7.8 What you must record in the Train Register**

- you must note in the Train Register the times at which:
  - the EO reports for and leaves duty
  - the EO arrives at and leaves the crossing
  - local control is taken and given up