

## systems of safeworking

# NSY 516 Pilot Staff Working

### Purpose

To prescribe the rules for pilot staff working in the Network.

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### Method principle

Pilot staff working may be used in Rail Vehicle Detection Territory to authorise rail traffic movements that are not permitted under a system of Safeworking.

The correct pilot staff or half pilot staff (half-staff) is the authority to occupy a pilot staff section.

Pilot staff working allows:

- wrong running-direction movements
- unsignalled movements
- following rail traffic entries into an occupied pilot staff section, but not into the same block.

Where possible, fixed signals are used to control rail traffic movements while pilot staff working is in operation.

A pilot staff section must have:

- a pilot staff, or
- for unidirectional movements only, the entry-end half-staff if the exit-end half-staff for the pilot staff section is secured out of use.

Rail traffic must not enter or occupy the pilot staff section unless the pilot staff or half-staff is on hand at the points, crossover, signal or sign at the entry to the pilot staff section.

When not in use, pilot staffs and half-staffs must be secured.

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### Limits of a pilot staff section

A pilot staff section extends:

- from the signal or STOP sign at the entry to the portion of track used for pilot staff working
- to the signal or STOP sign at the exit from the pilot staff section.

Pilot staff working may include more than one section within its limits, if:

- a large pilot staff is used
- half-staffs, if present, are removed and secured.

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### Unidirectional lines

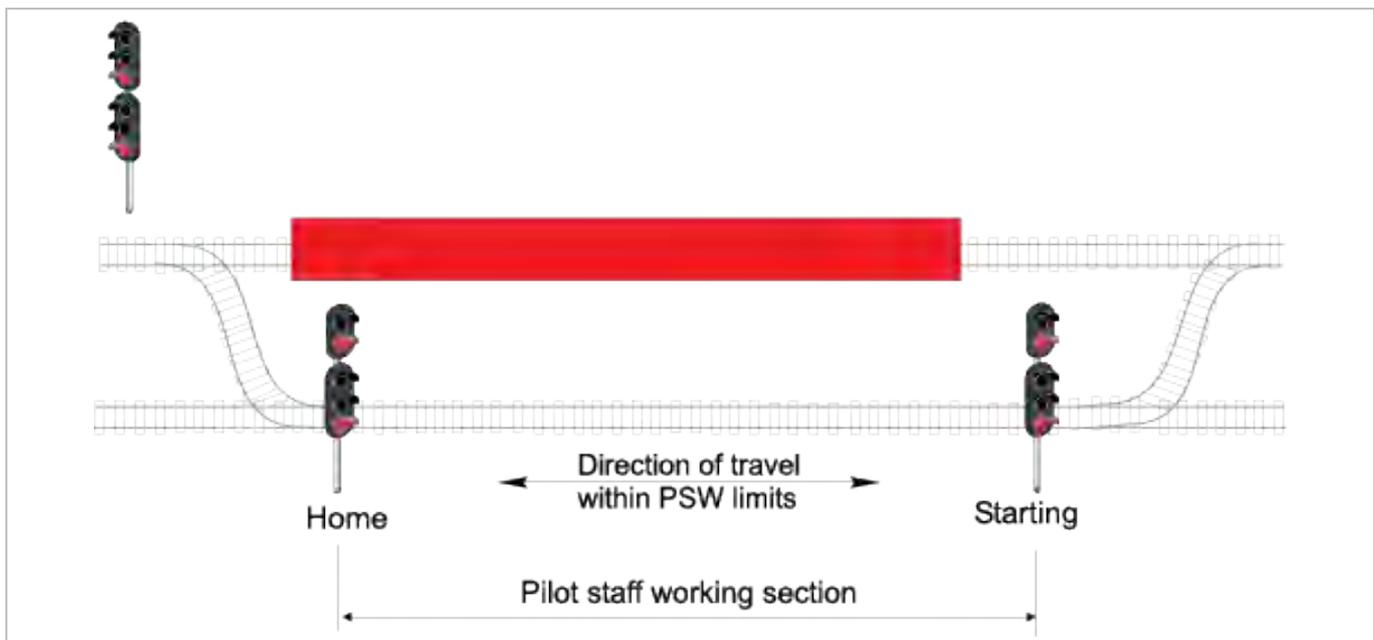
Pilot staff working limits are expressed in terms of travel in the right running-direction.

Entry to a pilot staff section must be controlled by:

- a starting or home/starting signal, or
- if there is no suitable starting or home/starting signal:
  - the signal or STOP sign immediately protecting the points or crossover being used, or
  - the first available signal within 2500m before the points or crossover being used.

The pilot staff section must extend to a signal or STOP sign at the exit-end.

**FIGURE 1:** Example of a pilot staff section defined by signals



### Bidirectional lines

A pilot staff section must extend from a starting or home/starting signal at the entry-end to the opposing starting or home/starting signal at the exit-end.

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### Points or crossovers

Where points and crossovers are remote from the controlling location and if safe places are available to operate points and crossovers, a Qualified Worker must be placed to:

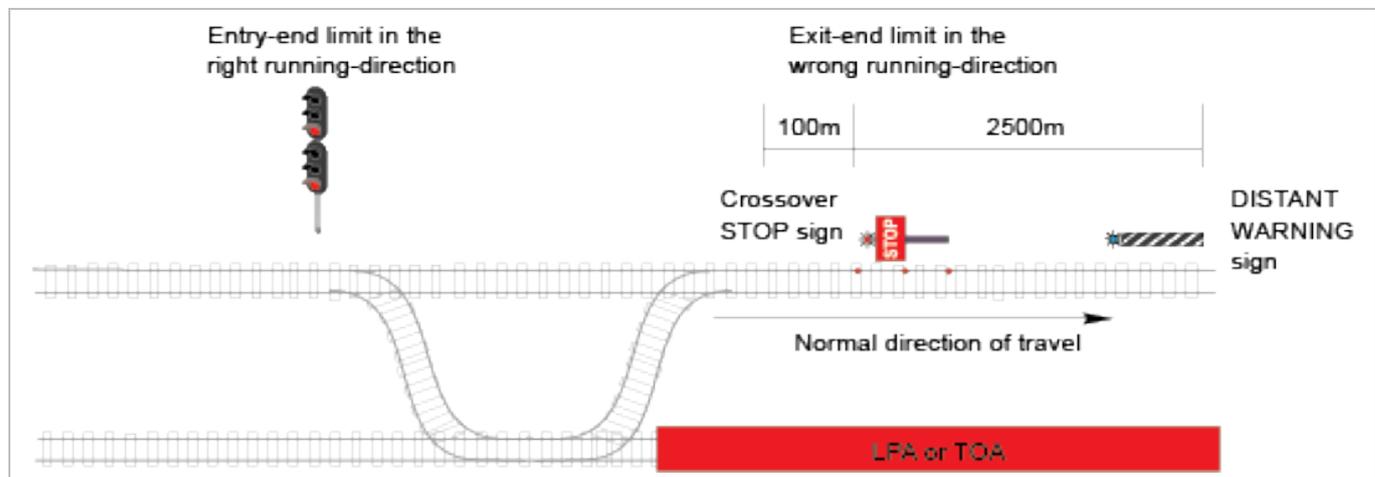
- act as the Signaller, and
- operate the points or crossover.

If safe places are not available for Qualified Workers to operate the points and crossovers:

- the points and signals must be operated by the Signaller at a remote location, and
- a Qualified Worker must be provided to issue and collect the authority and act under the instructions of the Signaller, and
- the Signaller must not allow rail traffic to pass a signal protecting entry to the pilot staff working section unless the Qualified Worker has given assurance that the pilot staff is on hand.

If there are no signals immediately protecting points or a crossover, STOP and DISTANT WARNING signs must be placed in accordance with the requirements specified in this Rule.

**FIGURE 2:** Example of using STOP sign and DISTANT WARNING sign



### Introducing pilot staff working

A Network Controller must authorise the introduction of pilot staff working.

Before authorising the introduction of pilot staff working, the Network Controller must arrange to tell:

- affected Network Controllers and Signallers, and
- workers known to be on the affected portion of track.

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The Network Controller must:

- record, in permanent form, the introduction of pilot staff working, and
- compile and issue an *NRF 010 Pilot Staff Working Introduction* form.

### Changing a pilot staff section

To change an established pilot staff section, the Network Controller must:

- cancel the existing Pilot Staff Working Introduction form, and
  - compile and issue a new Pilot Staff Working Introduction form.
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## Method description

### Pilot staffs

A pilot staff is:

- a large pilot staff, or
- joined half-staffs.

The pilot staff for the section must be marked with the limits of the pilot staff working and:

- the line for which pilot staff working is authorised, or
- a reference to item 2 of the *NRF 008 Pilot Staff Notice (PSN)* form.

Large pilot staffs are individually numbered, and inscribed:

- BLACK AND WHITE, if the aperture is diamond-shaped, or
- BLACK AND YELLOW, if the aperture is circular.

Adjoining pilot staff sections using large pilot staffs must use staffs with different aperture shapes in the head.

The half-staff for a pilot staff section is marked with:

- the limits of pilot staff working, and
- the name of the line for which pilot staff working is authorised.

Half-staffs are secured in locks at the ends of some bidirectional sections. Removing a half-staff from its lock prevents signals allowing entry to the section from being cleared.

### Pilot Staff Tickets

If at least one movement in the same running-direction will follow, an *NRF 007 Pilot Staff Ticket* must be issued to the Driver or Track Vehicle Operator.

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### Warning Drivers and Track Vehicle Operators

Drivers and Track Vehicle Operators must be warned that pilot staff working has been introduced and to expect the signal before the entry to the limits of pilot staff working to be at STOP.

### Using Handsignallers

Handsignallers must be placed at:

- STOP signs, and
- block posts, and
- protecting signals that must be passed at STOP to enter or exit the limits of pilot staff working, and
- automatic level crossings.

### Block posts

A Network Controller may authorise establishment and removal of block posts in a pilot staff section.

Before authorising establishment or removal of a block post, the Network Controller must be assured that the pilot staff section:

- is not occupied, and
- will not be occupied before the block post is established or removed.

Block posts must not be located so that rail traffic:

- stands on a level crossing, or
- stands on the controlling track-circuits of an automatic level crossing.

Handsignallers at block posts must not do any other work.

### Clearance Handsignallers

If the Signaller cannot be sure that the line as far as the first running signal beyond the pilot staff section is clear of rail traffic, a clearance Handsignaller must be placed at that signal.

The clearance Handsignaller must report to the Signaller when rail traffic has passed complete beyond the signal.

The clearance Handsignaller must not do any other work.

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### Recording

The establishment and removal of block posts, clearance locations and the placement of Handsignallers must be recorded, in permanent form, by:

- Network Controllers and Signallers, and
- Handsignallers at block posts and at clearance locations.

### Placing signs

Signs used for pilot staff working must be placed on the right hand side of the line in the wrong running-direction.

The following signs must be used for pilot staff working if required.

Sign	Placement
STOP sign with an attached steady red light	At least 100m before points or crossovers if there is no suitable signal protecting points or crossover.
DISTANT WARNING sign with an attached flashing blue light	At least 2500m before a STOP sign.
BLOCK POST sign	At block post locations.
BLOCK POST WARNING sign	At least 500m before block post locations

If the route used for a pilot staff section changes from one running line to another, temporary track speed signs must be placed to indicate approach to the crossover.

Temporary speed signs must be placed in accordance with *NSG 604 Indicators and signs*.

### Work on track

Work in the pilot staff section must be carried out in accordance with the relevant Network Rules and Network Procedures.

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### Assurances

The Network Controller must make sure or be assured that:

- effective communication is established between affected Qualified Workers, and
- previously issued Proceed Authorities in affected portions of track have been cancelled or fulfilled, and
- obstructions are protected, and
- in affected sections current work on track authorities are cancelled or fulfilled or work on track methods are ended, or worksites are protected, and
- unless authorised by the Network Controller, intermediate signal boxes and local control panels in affected sections are not switched in or out during pilot staff working, and
- both ends of the pilot staff section are attended, and
- when not being used as the pilot staff working Proceed Authority, signals used to allow entry to the limits of pilot staff working are set and kept at STOP, and
- blocking facilities are applied, and
- if necessary, facing points are or will be clipped and locked before rail traffic travelling under pilot staff working passes over them, and
- level crossings are protected.

The Network Controller must get an assurance from affected Signallers that unauthorised rail traffic is, and will continue to be, prevented from entering the pilot staff section.

Signallers must make sure that signals protecting the pilot staff working limits are set at STOP with blocking facilities applied.

If there are intermediate sidings within the pilot staff working limits, Signallers must make sure that the releasing switches are in the **NORMAL** position, and:

- apply blocking facilities to the releasing switches, or
  - if blocking facilities cannot be applied, restrain rail traffic in the sidings by giving affected Drivers and Track Vehicle Operators an *NRF 004 Condition Affecting the Network (CAN)* form.
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### Proceed Authority

Drivers or Track Vehicle Operators in possession of a pilot staff, half-staff or Pilot Staff Ticket are permitted to enter the pilot staff section by:

- clearing of the signal allowing entry, or
  - spoken authority from the:
    - Signaller, or
    - Signaller's representative, or
  - receiving a PROCEED handsignal.
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### Issuing a Proceed Authority

The Signaller must compile, and issue to each Driver or Track Vehicle Operator, a PSN detailing the pilot staff working.

A Driver or Track Vehicle Operator must hold:

- the pilot staff, or
- a Pilot Staff Ticket, having seen the pilot staff, or
- the half-staff, having seen the Pilot Staff Working Introduction form, or
- a Pilot Staff Ticket, having seen the half-staff and the Pilot Staff Working Introduction form, or
- a half-staff, having seen the Signaller separate the joined half-staffs.

### Authorising rail traffic movements

Where possible, fixed signals must be used to authorise:

- entry into a pilot staff section, and
- travel within a pilot staff section, and
- following movements, and
- exit from a pilot staff section.

Signals that cannot be cleared may be passed at STOP in accordance with *NSG 608 Passing signals at STOP*.

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If shunting limit signs are located within a pilot staff section, they may be passed only:

- on authority of the Signaller, or
- if authorised in the PSN.

A Driver or Track Vehicle Operator must:

- check that the pilot staff or half-staff is correct for the section
- pass signals at STOP only:
  - if authorised in the PSN, or
  - in accordance with *NSG 608 Passing signals at STOP*.

### Pilot staff section entry or exit

Before authorising rail traffic to enter or exit a pilot staff section, the Signaller must make sure that:

- the Network Controller has authorised the movement, and
- the block ahead is unoccupied, and
- the correct route is set and secured, and
- no conflicting routes are set.

### Travel within a pilot staff section

The Network Controller may authorise a Driver or Track Vehicle Operator holding the pilot staff, half-staff or Pilot Staff Ticket for the section to travel:

- through the section, or
- to an intermediate location to terminate clear of the main line.

If terminating at an intermediate location, the Network Controller must arrange for a Qualified Worker to collect and transfer the pilot staff or half-staff.

If a Driver or Track Vehicle Operator is authorised to travel to an intermediate location on a Pilot Staff Ticket, the Driver or Track Vehicle Operator must:

- tell the entry-end Signaller when clear of the main line, and
- fulfill the Pilot Staff Ticket.

#### Note

To enter a pilot staff section from an intermediate location, the Driver or Track Vehicle Operator must hold the pilot staff or half-staff.

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The Network Controller may authorise a Driver or Track Vehicle Operator holding the pilot staff or half-staff for the section to travel to a nominated location within the section and return to the entry-end.

Before starting to return, the Driver or Track Vehicle Operator must get authority from the Network Controller.

Before authorising the return, the Network Controller must:

- advise Signallers, and
- arrange for affected Handsignallers at block posts to be told about the movement.

### Following movements

Following movements may be authorised by the clearing of fixed signals.

If fixed signals cannot be cleared or are not available, the Signaller may authorise following movements after establishing that the block ahead is clear in accordance with *NSG 608 Passing signals at STOP*.

#### Note

Unless block working has been established for the pilot staff section, a PSN must not authorise running signals that cannot be cleared to be passed at STOP.

### Movements to and from the limits of a Local Possession Authority (LPA) or Track Occupancy Authority (TOA)

Before authorising movements into a pilot staff section for rail traffic to enter or exit a LPA or a TOA, the Network Controller must be assured that:

- the rail traffic is associated with the LPA or TOA, and
  - Signallers for the pilot staff section have consulted, and
  - the pilot staff section is not occupied, and
  - the pilot staff or half-staffs for the section are secured out of use.
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### Using pilot staffs

#### Change of running-direction

Before the running-direction of a pilot staff section is changed, the Signaller at the entry-end for the first movement in the new running-direction must:

- hold the pilot staff, and
- arrange for affected Handsignallers to be told about the change.

#### Unidirectional movements

A half-staff authorises movements in only one direction.

The Network Controller must be assured that the exit-end Signaller for the section has withdrawn the exit-end half-staff from its lock and secured it out of use.

The entry-end Signaller must make sure that the exit-end half-staff has been secured out of use and record the details on the PSN.

#### Transferring pilot staffs

The Network Controller may authorise the transfer of a pilot staff or half-staff by a means other than rail.

The Network Controller must:

- make sure that the pilot staff section is not occupied, and
- tell the affected Signallers.

If it is necessary to separate joined half-staffs and to return one half-staff to its correct location by rail, a Signaller must make sure that:

- the joined half-staffs are separated in the sight of the Driver or Track Vehicle Operator, and
  - the correct half-staff is given to the Driver or Track Vehicle Operator, and
  - the remaining half-staff is secured out of use, and
  - the Driver or Track Vehicle Operator is given a PSN recording that the remaining half-staff has been secured out of use.
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### Suspending pilot staff working

Pilot staff working may be suspended if the section is not required for rail traffic movements. Only the Network Controller may suspend pilot staff working.

Rail traffic must not enter the pilot staff working section during the suspension of pilot staff working.

#### Note

Suspension of pilot staff working does not reinstate the normal system of Safeworking.

Before suspending pilot staff working, the Network Controller must be assured that:

- the pilot staff section is not occupied, and
- Qualified Workers have been told about the suspension of pilot staff working, and
- Signallers have secured the pilot staff or half-staffs for the section out of use.

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### Ending pilot staff working

Before authorising the end of pilot staff working, the Network Controller must be assured that:

- the pilot staff section is not occupied, and
- Qualified Workers have been told about the end of pilot staff working, and
- block posts and clearance locations have been removed, and
- large pilot staffs have been secured out of use, and half-staffs have been returned to their correct locks.

Network Controllers and Signallers must:

- record, in permanent form, the end of pilot staff working, and
  - fulfil the Pilot Staff Working Introduction form.
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### Related Documents

<i>NPR 707</i>	<i>Clipping points</i>
<i>NPR 715</i>	<i>Protecting Type F level crossings</i>
<i>NPR 717</i>	<i>Using emergency roadside warning equipment</i>
<i>NPR 721</i>	<i>Spoken and written communication</i>
<i>NPR 723</i>	<i>Using block posts</i>
<i>NPR 724</i>	<i>Using clearance locations</i>
<i>NPR 725</i>	<i>Using a large pilot staff</i>
<i>NPR 726</i>	<i>Using half pilot staffs</i>
<i>NPR 727</i>	<i>Using crossovers for special working</i>
<i>NPR 728</i>	<i>Operating emergency crossovers</i>