NSY 512 Manual Block Working

Description

This document describes the requirements for manually maintaining blocks between rail traffic movements.

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Purpose

To prescribe the rules for manually maintaining blocks between rail traffic movements in the Network.

Method principle

Manual block working manually prevents rail traffic entries into occupied blocks.

Manual block working must be used if:

- it is specified in another Network Rule
- a train has been advertised as a block train
- rail traffic does not reliably operate track-circuits
- the Signaller needs to block work rail traffic
- the signalling system is not, or might not be, operating correctly.

The blocks used for manual block working may differ from those normally provided by the signalling system.

Signallers or Handsignallers controlling entry to a block must not authorise rail traffic to enter the block before the block is clear.

Basic block working

Basic block working may be used on unidirectional and bidirectional lines in Rail Vehicle Detection territory, but may be used only for movements normally allowed by those systems of Safeworking.

Signals passed at **STOP** during basic block working must be passed in accordance with NSG 608 Passing signals at STOP.

Signallers may require Drivers or Track Vehicle Operators to report when their train or track vehicle has passed complete beyond nominated locations.

CAN block working

CAN block working is manual block working, using a *NRF 004 Condition Affecting the Network (CAN)* form to warn Drivers and Track Vehicle Operators about the working.

CAN block working may be used only for right running-direction movements on unidirectional lines.

Signallers, Handsignallers and clearance Handsignallers must record, in permanent form:

- train numbers and track vehicle numbers
- arrival times
- departure times.

Proceed Authority

The authority to enter and occupy a block under manual block working is:

- clearing of the signal allowing entry, or
- the authority of a Handsignaller at a block post, or
- passing a signal at **STOP** in accordance with NSG 608 Passing signals at STOP.

Basic block working

The limits for basic block working extend from a controlled signal to:

- another controlled signal, or
- a nominated location.

Before rail traffic enters the limits, Signallers must make sure that points for the intended route are set and secured.

After rail traffic enters the limits, Signallers must:

- set the entry-end signal at **STOP**, with blocking facilities applied
- maintain blocking facilities until rail traffic has passed complete beyond the nominated location.

CAN block working

Unless notified on a CAN form about signals that may be passed at **STOP**, Drivers and Track Vehicle Operators must act in accordance with NSG 608 Passing signals at STOP.

Unless Drivers and Track Vehicle Operators are instructed otherwise, signals detailed in a CAN form may be passed at **STOP**:

- without further authorisation
- at normal speed.

> **Note**
>
> A CAN form must not authorise signals with prohibitive signs to be passed at **STOP**.

CAN block working limits may extend from:

- the last working controlled signal before the first affected signal, or
- the first affected signal,

to:

- the first suitable controlled signal after the last affected signal, or
- the last affected signal.

If an affected automatic signal is used as an entry-end or exit-end limit of CAN block working, a Handsignaller must be placed at the signal.

If the Handsignaller at an automatic signal used as the exit end limit of CAN block working cannot establish that the block ahead is clear, a clearance Handsignaller must be placed at the next signal.

Block posts

The Network Controller may authorise establishment and removal of block posts.

Before authorising establishment or removal of a block post, the Network Controller must be assured that the line between the limits of CAN block working:

- is not occupied
- 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.

Placing signs

Signs used for CAN block working must be placed as follows:

Sign	Placement
BLOCK POST	At block post locations.
BLOCK POST WARNING	At least 500m before block post locations.

If practicable, a **BLOCK POST WARNING** sign must also be placed at least 500m before an automatic signal used as the exit-end limit of CAN block working.

Authorising and reporting

The Signaller or Handsignaller controlling entry to a block must:

- before authorising rail traffic to enter the block, get assurance that the block is clear from the Signaller or Handsignaller for the exit-end of the block
- report rail traffic departures to the Signaller or Handsignaller for the exit-end of the block.

The Signaller or Handsignaller for the exit-end of the block must report rail traffic clearance to the Signaller or Handsignaller controlling entry to the block.

If an automatic signal is used as the exit-end limit, the Handsignaller at the signal must stop rail traffic, and tell Drivers or Track Vehicle Operators:

- that the exit-end limit has been reached
- to obey the next signal.

Before authorising rail traffic to depart, the Handsignaller at an automatic signal being used as the exit-end limit of CAN block working must make sure that the block ahead is clear.

If the entire block to the first signal beyond the exit-end limit cannot be seen to be clear, a clearance Handsignaller must be placed at that signal.

The clearance Handsignaller must report to the exit-end Signaller or Handsignaller when rail traffic has passed complete beyond the clearance location.

The clearance Handsignaller must not do any other work.

Recording

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

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

Introducing CAN block working

The Network Controller may authorise the introduction of CAN block working.

The Network Controller must arrange to tell affected Network Controllers and Signallers.

The Network Controller and Signallers must agree about the signals within the CAN block working limits which may be passed at STOP.

The Network Controller may arrange for a Signals Maintenance Representative to suppress train stops.

> **Note**
>
> Affected signals used as the entry-end limit or exit-end limit must:
>
> - not have train stops supressed
> - not be included on the CAN form as signals that may be passed at **STOP**.

Network Controllers and Signallers must record, in permanent form, the start of CAN block working.

Issuing CAN forms

Before authorising rail traffic to enter the CAN block working limits, Signallers must arrange to issue Drivers and Track Vehicle Operators with a CAN form including details of:

- CAN block working limits
- locations of block posts
- locations of **WARNING** signs
- signals that may be passed at **STOP** without further authorisation
- whether mechanical train stops have been suppressed
- whether Automatic Train Protection (ATP) train stops have been suppressed.

The CAN form for the first rail traffic to enter the CAN block working limits may include instructions to the Driver or Track Vehicle Operator to, if necessary:

- check and set points
- clip and lock facing points.

Ending CAN block working

Before ending CAN block working, the Network Controller must be assured that:

- the line between the CAN block working limits is not occupied
- Qualified Workers have been told about the end of CAN block working

- block posts, clearance locations and Handsignallers have been removed.

Network Controllers and Signallers must record, in permanent form, the end of CAN block working.

Related Documents

NPR 721 Spoken and written communication

NPR 722 Manual block working

NPR 723 Using block posts

NPR 724 Using clearance locations

NPR 746 Authorising rail traffic to pass an absolute signal at STOP