

ANSY 512

Manual Block Working

Applicability

NSW

SMS

Publication Requirement

External Only

Document Status

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2.0	11 October 2015

Purpose

To prescribe the rules for manually maintaining *blocks* between *rail traffic* movements in the *Australian Rail Track Corporation (ARTC) NSW 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 other *Network Rules*
- a *train* has been *advertised* as a *block train*
- rail traffic does not reliably operate *track-circuits*
- the *Network Control Officer* 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 *ANSG 608 Passing signals at STOP*.

Network Control Officers 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 Condition Affecting the Network (CAN) form (*ANRF 004*) 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*, and
- arrival times, and
- 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 Rule *ANSG 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.

After rail traffic enters the limits, Signallers must:

- set the entry-end signal at STOP, with *blocking facilities* applied, and
- maintain the 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 Rule *ANSG 608 Passing signals at STOP*.

Unless Drivers or track vehicle operators are instructed otherwise, signals detailed in a CAN form may be passed at STOP:

- without further authorisation, and
- at *normal speed*.

NOTE

The signals authorised in a CAN form for passing at STOP must not include signals with prohibitive signs.

CAN block working limits may extend from the:

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

to the:

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

NOTE

If an *automatic* signal is used as a limit of CAN block working, a Handsignaller must be stationed at the signal:

- for the entry-end limit, to control rail traffic entry into the block
- for the exit-end limit, to control rail traffic exit from the block.

NOTE

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 stationed at the next signal.

Block posts

Only the *Train Controller* may authorise establishment and removal of block posts.

Before authorising establishment or removal of a block post, the Train Controller must be assured that:

- the line between the limits of CAN block working is not occupied, and
- rail traffic will not be authorised to enter the portion of line being used for CAN block working before the block post has been 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.

WARNING signs

If practicable, WARNING signs must be placed 500m before:

- block posts, or
- if it is an automatic signal, the exit-end limit.

Authorising and reporting

Signallers or Handsignallers controlling entry to a block must:

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

Before authorising rail traffic to depart, a 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 limit cannot be seen to be clear, a clearance Handsignaller must be placed at that signal to provide clearance.

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 other work.

Recording

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

- Network Control Officers, and
- Handsignallers at block posts and at clearance locations.

Starting CAN block working

Only the Train Controller may authorise the introduction of CAN block working.

The Train Controller must arrange to tell affected Network Control Officers.

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

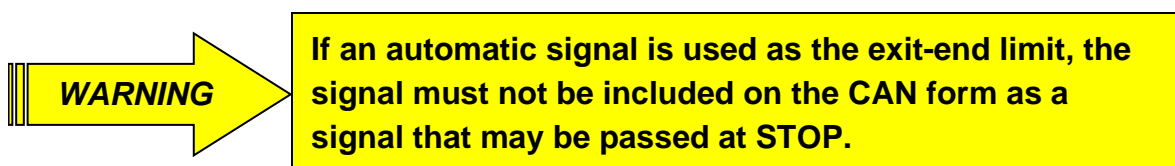
The Train Controller may arrange for a *Signals Maintenance Representative* to suppress *train stops*.

Network Control Officers 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:

- CAN block working limits, and
- details of block posts, and
- locations of WARNING signs, and
- identification details of signals that may be passed at STOP without further authorisation, and
- whether 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*, and
- if necessary, clip and lock *facing points*.

Ending CAN block working

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

- it is safe to do so, and
- block posts and Handsignallers have been removed.

Network Control Officers must record, in permanent form, the end of CAN block working.

Related ARTC Network Procedures

ANPR 721	Spoken and written communication
ANPR 722	Manual block working
ANPR 723	Using block posts
ANPR 724	Using clearance locations
ANPR 746	Authorising rail traffic to pass an absolute signal at STOP

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