Network Safeworking Rules and Procedures

Manual Block Working

Rule Number: 5023





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Glossary for this Rule

Active Control Level

Crossing

A road or pedestrian level crossing where warning equipment warns road users and pedestrians about approaching rail traffic by devices such as

flashing lights or barriers.

Alternative Proceed Authority

(APA)

An APA may be used to authorise rail traffic movements when the Proceed Authority normally provided by the system of Safeworking is not available.

Authority Formal name for a written Authority (e.g. Local Possession Authority,

Alternative Proceed Authority).

Axle Counters Equipment used to detect the presence of rail traffic vehicles by counting

the number of axles entering or leaving a location. They may be used to

operate signalling or other infrastructure equipment.

Blocking Facility A facility used by a Network Controller to prevent either the unintended

issue of an Occupancy Authority, or the operation of points or signalling

equipment.

Centralised Traffic Control

(CTC) Territory

The portions of line where the Centralised Traffic Control system of

Safeworking is used.

Clear A proceed indication displayed by a signal.

In reference to a track circuit, block, section or signal route, the absence of

rail traffic.

In reference to track workers being clear of track.

Competent Worker A worker certified as competent to carry out a relevant task.

Controlled Absolute Signal A signal that is controlled or operated by a Network Controller. The signal

must not be passed at STOP without authority.

Departure Signal A Controlled Absolute signal controlling the entrance to a Single line section

in CTC territory.

Joint Occupancy Simultaneous occupancy of track within defined limits.

Level Crossing A location where the railway line and a road or pedestrian walkway cross

paths on the same level (at grade).

Manual Block Working A method of working, which ensures sole occupancy by administratively

maintaining the block for rail traffic movements where the control system

cannot.

Network A combination of track and other associated infrastructure controlled by

Brookfield Rail.

Network Controller A Competent Worker who authorises and issues Occupancy Authorities,

and works points, signals and other signalling equipment to manage routes

for safe and efficient transit of rail traffic in the Network.



Occupancy Presence of rail traffic or track workers on track.

Permanent Record A record made in writing or in an electronic system, and kept for reference

and audit.

Permissive Working A method of safeworking in CTC territory where the line between two

adjoining Block Stations is divided to permit following rail traffic to enter

the same Block Section with safe separation.

Points A track component consisting of paired pieces of tapered rail (blades) that

can be moved and set to allow tracks to diverge or converge.

Rail Traffic Trains and track vehicle or vehicles travelling on the Network.

Rail Traffic Crew Competent Workers responsible for the operation of the Motive Power Unit.

Restrain To prevent movement of rail traffic with signals, signalling equipment,

blocking facilities, or the issue of a written warning.

Restraint Authority The Restraint Authority directs rail traffic not to depart the location

irrespective of any available Proceed Authority.

Right Running-Direction The normal direction of travel on unidirectional lines.

Road Rail Vehicle A road vehicle fitted with additional rail gear that enables the vehicle to be

driven on rail.

Section The line between the departure end station limit of one location and the

arrival end station limit of another location. A section consists of one or

more blocks.

Secure To safeguard against accidental or unauthorised access or movement.

Track-Circuit An electric circuit where current is carried through the rails and used to

detect the presence of trains. Track-circuits are used in the operation and

control of points, signalling and level crossing equipment.

Track Work Authority (TWA) An authority for non-exclusive occupancy of track by track workers and

equipment within a defined portion of track for a specified period..

Travel Planned or purposeful movement from one location to another.

1. Purpose

The purpose of this Rule is to describe how to manually maintain blocks between *Rail Traffic* movements in the *Network* where the *Rail Traffic* may not be reliably detected on *Centralised Traffic Control (CTC) Territory*.

General

The Network Controller uses Manual Block Working to prevent Rail Traffic from entering Occupied blocks.



WARNING: If *Rail Traffic* that does not reliably operate *Track-Circuits* is to *Travel* over *Points* that automatically return to a normal setting, and the *Points* are in a position where they can automatically return to normal, the *Points* must be *Secured* for the passage of the *Rail Traffic*.

This Rule does not apply to *Road Rail Vehicle* movements; *Road Rail Vehicle* movements must be in accordance with Rule 3019 Track Vehicles.

Manual Block Working is used when:

- it is specified in other *Network* publications;
- Track-Circuits or Axle Counters may not reliably detect Rail Traffic; or
- the Network Controller requires Manual Block Working to be used.

The Authority for entry to a block is a PROCEED signal indication.



NOTE: Where a *Departure Signal* is the entry signal and that *Departure Signal* fails, an *Alternative Proceed Authority (APA)* will be the *Authority* for entry into the *Block*.

Manual Block Working must be used only for Right Running-Direction movements.

The limits for *Manual Block Working* must extend from one *Controlled Absolute Signal* to another *Controlled Absolute Signal*.



NOTE: Permissive Working is not permitted during Manual Block Working.

Signals at STOP must not be passed during *Manual Block Working* unless authorised by the *Network Controller* in accordance with Rule 6013 Passing Fixed Signals at Stop.

2.1 Joint Occupancy

When Manual Block Working is in effect, Joint Occupancy between a Track Work Authority (TWA) and an authorised Rail Traffic movement is permitted.

3. Assurances

Network Controllers must be assured that:

- the block is clear of rail traffic before authorising manual block working;
- only rail traffic authorised to travel under manual block working will enter the block;
 and
- the block is clear of rail traffic before resuming normal operations.

4. Authorising and Reporting

The Network Controller authorises and implements Manual Block Working.

The Network Controller must advise other affected Network Controllers that Rail Traffic will be worked under Manual Block Working conditions.

Where required, the *Rail Traffic Crew* or a *Competent Worker* must report to the *Network Controller*.

- entry into the block Section; and
- exit from the Section.

5. Maintaining Separation

Once Rail Traffic enters the block, the Network Controller must:

- set the entry-end signal at STOP, with Blocking Facilities applied in accordance with Rule 6003 Blocking Facilities; and
- maintain the blocking facilities until rail traffic has passed complete beyond the nominated location.

6. Restraint of Rail Traffic

Rail Traffic must be prevented from entering a block Section in which Manual Block Working is in effect by the use of Blocking Facilities.

When it is necessary for *Rail Traffic* to be *Restrained* the *Network Controller* may provide written advice on a *Restraint Authority* to *Rail Traffic Crews*.



7. Active Control Level Crossing

If Rail Traffic needs to pass over an Active Control Level Crossing operated automatically by Track-Circuits, but the Rail Traffic cannot be relied upon to activate the Track-Circuits, Rail Traffic Crews must:

- stop short of the Active Control Level Crossing, and if possible manually operate the Active Control Level Crossing; or
- arrange to stop approaching road and pedestrian traffic.

Rail Traffic may proceed over the Active Control Level Crossing only if it is safe to do so.

8. Ending Manual Block Working

The Network Controller must be assured that the block Section is Clear of any Rail Traffic before ending Manual Block Working.

9. Keeping Records

The Network Controller must keep a Permanent Record of the details of Manual Block Working.

10. References

3019 Track Vehicles

6003 Blocking Facilities

6013 Passing Fixed Signals at STOP

11. Effective date

4 May 2016