

# Network Safeworking Rules and Procedures

## Train Order System Blocking

Rule Number: 3023



**Brookfield**  
Rail

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## Authorisation



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# Glossary for this Rule

<i>Access</i>	A designated safe way into, along, across or out of the Rail Corridor.
<i>Adjacent</i>	Near to, close to, parallel to.
<i>Authority</i>	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
<i>Blocking Facility</i>	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.
<i>Clear</i>	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.
<i>Competent</i>	Having the ability, skill and certification to carry out a relevant task.
<i>Complete</i>	Rail traffic where the consist has not parted.
<i>Danger Zone</i>	Everywhere within 3m horizontally from the nearest rail and any distance above or below this 3m, unless a safe place (see Safe Place) exists or has been created.
<i>Issue</i>	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
<i>Level Crossing</i>	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
<i>Local Possession Authority (LPA)</i>	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.
<i>Location</i>	A place in the Network with a designated name, identification number, or signalling reference.
<i>Lookout</i>	A Competent Worker responsible for <ul style="list-style-type: none"> <li>• keeping watch for approaching rail traffic; and</li> <li>• warning other workers to stand clear of the line before the rail traffic arrives.</li> </ul>

<i>Network</i>	A combination of track and other associated infrastructure controlled by Brookfield Rail.
<i>Network Controller</i>	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.
<i>Obstruct</i>	To make a line unsafe for the passage of rail traffic by the placing of tools, equipment or plant on the track.
<i>Permanent Record</i>	A record made in writing or in an electronic system, and kept for reference and audit.
<i>Points</i>	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
<i>Possession Protection Officer</i>	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.
<i>Protection</i>	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
<i>Protection Officer</i>	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
<i>Rail Traffic</i>	Trains and track vehicle or vehicles travelling on the Network.
<i>Rail Traffic Crew</i>	Competent Workers responsible for the operation of the Motive Power Unit.
<i>Safe Place</i>	A Safe Place is: <ul style="list-style-type: none"> <li>• where there is at least three metres clearance from the nearest Running Line;</li> <li>• on a Platform behind the safety lines;</li> <li>• within a purpose-built refuge or shelter;</li> <li>• where a structure or physical barrier has been erected to provide a position of safety; or</li> <li>• immediately in front of stationary and Secured Rail Traffic.</li> </ul>
<i>Safety Assessment</i>	An assessment process used to identify hazards for all work planned for the Rail Corridor and its potential to intrude on the Danger Zone.
<i>Section</i>	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.
<i>Secure</i>	To safeguard against accidental or unauthorised access or movement.

<i>Signalling and Communications Infrastructure</i>	Signalling equipment and telecommunications equipment used as part of the safeworking and operating systems of the Network.
<i>Stable</i>	To leave rail traffic unattended and secured, usually in a siding.
<i>Station</i>	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
<i>Track</i>	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
<i>Track Vehicle</i>	A vehicle, usually self-propelled, used for inspecting and/or maintaining infrastructure.
<i>Train</i>	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
<i>Train Order</i>	An authority issued by the Network Controller for the movement of rail traffic or issue of LPA track work authorities.
<i>Train Order System Blocking</i>	A facility used by a Rail Traffic Controller to protect rail traffic, track workers and prevent the unintended issue of an Occupancy Authority on the Train Order system.
<i>Train Order Territory</i>	The portions of line where the Train Order system of Safeworking is used.
<i>Unauthorised</i>	Not given approval, or exceeding the limit of authority.
<i>Uni-Directional</i>	Allowing for normal travel in one direction only according to the infrastructure and system of Safeworking in use.
<i>Work on Track</i>	The work performed in the Danger Zone.
<i>Work on Track Authority</i>	An authority to perform work on track. See Local Possession Authority (LPA); Track Occupancy Authority (TOA) and Track Work Authority (TWA),

# 1. Purpose

The object of this Rule is to detail the procedures for *Train Order System Blocking (TOSB)* used as a method of working in the *Danger Zone* in *Train Order Territory*

# 2. General

The *TOSB* method of *Protection* must be applied to the computerised *Train Order* system only.

*Blocking Facilities*, in accordance with Rule 6003 Blocking Facilities, on the *Train Order System (TOS)* prevent *Train Orders* being *Issued*.

*TOSB* is used to exclude *Rail Traffic* from a portion of *Track*.

The *TOSB* method must not be used for work that breaks the *Track* or alters *Track* geometry or structure.

Only *Network Controllers* may approve *TOSB* for *Track* under their control.

The *Protection Officer* applying this Rule must have a minimum *Protection Officer Level 1 (PO1) Competency* in accordance with Rule 1004 Track Access Accreditation.



**WARNING: If the *Safety Assessment* shows that a *Work on Track Authority* is necessary, work must not be done using the *TOSB* method.**

If a *Safety Assessment* shows that it is safe, some kinds of work may be done in the *Danger Zone* without a *Work on Track Authority*. *TOSB* is one of those methods of working.

*TOSB* may be used only:

- to allow livestock to cross the *Track*;
- for work not requiring tools;
- for work using tools which can be easily and immediately removed from the *Track* by **one worker** without mechanical assistance;
- work involving light tools powered by a cord or hose (i.e compressed air, gas or electricity);
- at *Level Crossings*, to allow vehicles to cross the *Track*; or
- to allow vehicles to directly cross the *Track*.

If *TOSB* is used, one worker may work alone. In this case, that worker is also the *Protection Officer*.

## 3. Authorisation

Before authorising *TOSB* working, the *Network Controller* must make sure that:

- a *Track Occupancy Authority* is not in use within the proposed limits;
- any *Rail Traffic* holding a *Uni-Directional Authority* has *Cleared* the limits of the proposed worksite by confirming:
  - with the *Protection Officer*, the *Rail Traffic* identification number of the lead vehicle of a *Train* or the last vehicle of a *Track Vehicle* movement with the *Protection Officer*;
  - with the *Rail Traffic Crew*, the *Location* of their *Rail Traffic*; or
  - that the *Section* is *Clear*.
- *Stabled Rail Traffic* that is within the limits of the *TOSB*, must not be authorised to move;
- the *Protection Officer* knows about any existing *Obstructions*; and
- *Blocking Facilities* have been applied to prevent *Unauthorised Rail Traffic* entry into the proposed limits.



**WARNING: The *Network Controller* must not permit *TOSB* if there is any doubt about the *Location* of the proposed worksite.**

The *Network Controller* must confirm with the *Protection Officer* the:

- Name, Track Access Permit number and contact details of the *Protection Officer*;
- type of work;
- intended start and finish times; and
- *Location* using two or more of the following identifiers:
  - a kilometre sign and *Section*;
  - *Station* name;
  - permanent structures, such as a bridge, roadway or overpass used only in conjunction with one of the above identifiers; or
  - another identifier.



### 3.1 Joint Occupancy

A TOSB cannot be authorised for a portion of track where a Track Occupancy Authority (TOA) is current.

The *Network Controller* may authorise a TOSB for a portion of Track where another *TOSB* or *TWA* is current.

The *Network Controller* may Issue the TOSB only if the *Protection Officers* have consulted and agree that a TOSB may be issued.



**NOTE:** Where a Local Possession Authority is in place, only the *Possession Protection Officer* for that LPA can approve the work.

## 4. Protection Officer

A *Protection Officer* is required for the period of the work, except if the *TOSB* is used to allow livestock or vehicles to directly cross the *Track*; in these circumstances the *Network Controller* may apply *TOSB*.

A *Protection Officer* must:

- make sure that work in the *Danger Zone* does not begin before the required safety measures are in place;
- before work begins, tell workers about the:
  - types and limits of *Protection* in place;
  - *Locations of Safe Places*;
- be responsible for the *Protection* of workers from *Rail Traffic*;
- make sure the *Tracks* between worksites and *Protecting Locations* remain *Clear of Obstructions*; and
- confirm with the *Network Controller* that *Blocking Facilities* have been applied to prevent the *Unauthorised* entry of *Rail Traffic*.



**NOTE:** A *Protection Officer* must be satisfied that other work will not interfere with *Protection* duties.

### 4.1 Request for TOSB from a Person Other than the Protection Officer

The *Network Controller* may apply *TOSB* to allow livestock or vehicles to directly cross the *Track*.

The *Network Controller* must:

- confirm the *Location* and the work to be done;
- make sure the line is *Clear* between the entry point and the proposed worksite and any *Rail Traffic* that has passed the worksite will not return;
- apply *Blocking Facilities* to the *Train Order* system;
- advise the person of the arrangements and authorise the work; and
- when told that the area is *Clear*, remove the *Blocking Facilities*.

## 4.2 Change of Protection Officer

An outgoing *Protection Officer* must tell an incoming *Protection Officer* about the worksite *Protection* arrangements.

The incoming *Protection Officer* must:

- tell affected *Network Controllers* about the changed contact arrangements; and
- make a *Permanent Record* of the handover.

# 5. Obtaining Approval for TOSB

The *Network Controller* and the *Protection Officer* must confirm and record on the Blocking Request for *Work on Track* form:

- the *Location* of the work;
- a unique identifying number;
- that *Blocking Facilities* have been applied to prevent entry of *Rail Traffic* into the portion of *Track* within the proposed limits;
- the *Blocking ID* number from the *Train Order System*;
- the *Points* to be clipped, in accordance with Procedure 9000 Clipping Points, if required;
- the duration of the work;
- the *Protection Officer's* name and contact details;
- the approving *Network Controller's* name;
- the time of approval; and
- the date of approval.

When the *TOSB* is approved the *Protection Officer* must ensure the required *Protection* is in place before work commences.

## 6. Protection



**WARNING: Work must not start in the *Danger Zone* until the required *Protection* is in place.**

The worksite must be a minimum of 500 metres from the *Protecting* limits, unless:

- *Points* are *Secured* to prevent *Rail Traffic Access*; or
- an easily reached *Safe Place* is available and a *Lookout* provided.

If *Rail Traffic* can approach from more than one direction, the *Protection Officer* must *Protect* all *Points* of entry into the *TOSB* limits.

### 6.1 Network Controller

The *Network Controller* must confirm with the *Protection Officer* that:

- *Blocking Facilities* have been applied;
- the line is *Clear* between the *Protecting* limits and the proposed worksite; and
- any *Rail Traffic* that has passed *Complete* beyond the worksite will not return.

*Network Controllers* must not authorise movements into portions of line where *TOSB* is in use.

### 6.2 Temporary Removal of Blocking Facilities

*Blocking Facilities* may be temporarily removed in accordance with Rule 6003 Blocking Facilities.

### 6.3 Adjacent Line

If the *Safety Assessment* indicates that workers need to be protected from *Rail Traffic* on *Adjacent* lines, the *Protection Officer* must arrange for *Adjacent* lines to be *Protected* in accordance with Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines.

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

## 7. Communications with Network Control

The *Protection Officer* must be the only point of contact between the *Network Controller* and work groups for matters of worksite *Protection*.

The *Protection Officer* must tell affected *Network Controllers* about:

- the *Protection* arrangements;
- *Protection* arrangements on *Adjacent* lines; and
- work progress at agreed times.

If the work is to exceed the agreed time, the *Protection Officer* must seek an extension of time.

When the agreed time limit has been exceeded by 15 minutes and the *Protection Officer* has not requested an extension of time the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

## 8. Ending TOSB

Before ending the *TOSB* the *Protection Officer* must make sure and tell the *Network Controller* that:

- all workers and equipment have *Cleared* the *Danger Zone*;
- *Points* securing devices have been removed;
- *Blocking Facilities* can be removed.

When told by the *Protection Officer* that the *Track* is *Clear* the *Network Controller* can remove the *Blocking Facilities*.

The *Network Controller* must confirm with the *Protection Officer* that the *Points* are working correctly after the *Points* have been restored to normal operation.

The *Protection Officer* must tell the *Network Controller* about operating restrictions that have been placed or removed.

## 9. Keeping Records

*Network Controllers* and the *Protection Officer* must keep *Permanent Records* about the details, including *Protection* arrangements and changes to the worksite *Protection* arrangements.

## 10. References

1004 Track Access Accreditation

4017 Overdue Occupancies

6003 Blocking Facilities

9000 Clipping Points

9010 Protecting Work from Rail Traffic on Adjacent Lines

## 11. Effective Date

01 October 2016