

# Network Safeworking Rules and Procedures

## Planning Work in the Rail Corridor

Rule Number: 3000



**Brookfield**  
Rail

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## Glossary for this Rule

<i>Absolute Signal Blocking (ASB)</i>	A method used by Competent Workers to carry out work on track using controlled absolute signals set and kept at STOP, without a formally issued work on track authority.
<i>Access</i>	A designated safe way into, along, across or out of the Rail Corridor.
<i>Access Provider</i>	An organisation that provides and manages a Rail Network and safe method of entry to that network for Access Users.
<i>Adjacent</i>	Near to, close to, parallel to.
<i>Adjoining</i>	In contact with, connected to.
<i>Advertise</i>	To give written or electronic notice, usually in advance, of planned activities.
<i>Associated Rail Traffic</i>	Rail traffic that performs track maintenance or construction tasks for the work.
<i>Authority</i>	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
<i>Brookfield Rail</i>	Brookfield Rail Pty. Ltd.
<i>Competent Worker</i>	A worker certified as competent to carry out a relevant task.
<i>Controlled Absolute Signal</i>	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
<i>Danger Zone</i>	Everywhere within three (3) metres horizontally from the nearest rail and any distance above or below this three (3) metres, unless a safe place (see Safe Place) exists or has been created.
<i>Effective Communication</i>	The ability to successfully send, receive and understand information. The communication does not need to be continuous.
<i>Emergency</i>	Incident requiring urgent action. The incident might involve death or serious injury, health or safety effects, significant damage to property or infrastructure.
<i>Exclusive Occupancy</i>	Sole occupancy of track within defined limits.
<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 Crossings</i>	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
<i>Light Tool or Device</i>	A tool that can be carried and easily removed by one person and is not powered by cord or hose (e.g. compressed air, gas, electricity).

<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>Lookout Working</i>	A safety measure used by Competent Workers to carry out work on track without a formally issued work on track authority.
<i>Network Controllers</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.
<i>Plant</i>	Equipment, machinery or apparatus used for the purpose of maintaining/constructing rail infrastructure (e.g. generators, excavators, backhoes, cranes).
<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 Corridor</i>	The land on which a railway is built; comprising all property between property fences, or from the nearest rail in each direction for the distance defined under the Brookfield Rail lease.
<i>Rail Traffic</i>	Trains and track vehicle or vehicles travelling on the network.
<i>Running Line</i>	A line (other than a siding) that is used for through movement of rail traffic, not normally used for stabling rail vehicles.
<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>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>Siding</i>	A portion of track where vehicles can be placed clear of the running lines.  Also see intermediate siding.
<i>Sighting Distance</i>	The distance that someone can clearly see along the track.
<i>Track</i>	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
<i>Track-Circuit</i>	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.
<i>Track Occupancy Authority (TOA)</i>	An authority for Competent Workers and their equipment to occupy a defined portion of track for a specified period.
<i>Track Work Authority (TWA)</i>	An authority for non-exclusive occupancy of track by track workers and equipment within a defined portion of track for a specified period..
<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.
<i>Train Order System Blocking (TOSB)</i>	A facility used by a Network Controller to protect rail traffic, track workers and prevent the unintended issue of an Occupancy Authority on the Train Order system.
<i>Unauthorised</i>	Not given approval, or exceeding the limit of authority.
<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

This Rule provides instructions designed to ensure that appropriate planning is carried out for work within the *Rail Corridor* and assessing the work for safety.

# 2. General

Work planned for the *Rail Corridor* must be assessed for safety and its potential to intrude into the *Danger Zone*.

Work in the *Danger Zone* must not:

- be carried out unless there is a *Safe Place* that can be easily reached; and
- begin until the required safety measure is in place.

Work in the *Danger Zone* must be carried out using one of the *Protection* methods listed in this Rule.

The level of safety must not be reduced:

- to allow *Rail Traffic* movements; or
- because of a lack of trained workers.

Workers in the *Rail Corridor* must wear long pants, long sleeved shirts and approved Personal Protection Equipment (PPE). The minimum PPE required is High Visibility clothing and Safety footwear.

*Effective Communication* with *Network Controllers*, *Possession Protection Officers* and *Protection Officers* must be maintained.

The *Protection Officer* must contact the *Network Controller* before workers enter the *Rail Corridor*.

## 3. Protection Officer

A worksite within or work that has potential to intrude into the *Danger Zone* must have a *Protection Officer* for the duration of the work.

The *Protection Officer* is responsible for managing the rail safety component of worksite *Protection*.

A *Protection Officer's* primary duty and responsibility is to keep the worksite and workers safe. The *Protection Officer* must be satisfied that other work will not interfere with this duty.

The *Protection Officer* must:

- wherever possible, compile a Worksite Safeworking Planner form and accompanying Worksite Protection Plan prior to arrival at the worksite;
- make a *Safety Assessment* upon arrival at site to confirm details in the Worksite Safeworking Planner;
- brief workers about the rail safety component of worksite *Protection*;
- make sure that the rail safety component of the work is done safely;
- communicate with the *Network Controller* about the work and *Protection* arrangements; and
- keep records about the *Work on Track* method and *Protection* arrangements in the *Protection Officer's* Workbook.



## 4. Assessing Safety

When making a *Safety Assessment*, *Protection Officers* must consider, amongst other factors, if:

- work will affect *Track* under the control of different *Network Controllers*, *Access Providers* or private *Siding* operators;
- appropriate numbers of *Competent Workers* are available to protect the work;
- easily reached *Safe Places* are available for workers;
- the *Sighting Distance* and the speed of approaching rail traffic will allow sufficient warning time to be given by *Lookouts*;
- it is possible to close the affected line during the work;
- there will be *Rail Traffic* on *Adjacent* lines;
- rail traffic will travel on an adjacent line in both directions over a *uni-directional* line
- there will be *Rail Traffic* between and/or within worksites;
- signals are available to protect worksites;
- other *Work on Track* will affect the worksites;
- there is safe passage to and from worksites;
- there is public *Access* to the *Rail Corridor*;
- there is a risk to workers from road traffic;
- the work will intrude on *Level Crossings*;
- the line is electrified or has power lines overhead;
- the line is *Track-Circuited*;
- the formation of the line and the *Location* will affect the work;
- *Effective Communication* is available;
- equipment used in the work will intrude into the *Danger Zone*;
- other groups need to be told about or involved in the work; and
- the potential for noise within and external to the worksite may impact on the worksite *Protection*.

The *Protection Officer* must regularly review safety measures and if conditions such as visibility or work *Location* changes make amendments to the worksite safety as required.

## 4.1 Use of Plant Near or Work Above the Danger Zone

Unless special precautions for *Protection of the Running Line* have been approved by Brookfield Rail, a *Work on Track Authority* must be used where:

- *Plant* is to be used and any portion of that *Plant* may encroach into the *Danger Zone*; or
- work is to be carried out above the *Danger Zone*.



**NOTE:** Special precautions may include, but not be limited to, chain link fencing, scaffolding, roofing above the *Running Line* and restrictive safety chains on *Plant*.

## 5. Multiple Access Providers

If the planned work will affect *Track* under the control of more than one *Access Provider*, the *Protection Officer* must get the relevant *Network Controllers'* authority.



**NOTE:** *Protection Officers* must be aware of the *Protection* arrangements required for *Adjoining Networks*.

Where necessary *Competent Workers* must be qualified in the *Adjoining Network* rules and procedures.

## 6. Level Crossings

If *Work on Track* will intrude into the *Level Crossing* or affect the *Level Crossing* operation, the *Protection Officer* must arrange to ensure the safety of:

- workers; and
- road, pedestrian and *Rail Traffic*.

## 7. Methods for Working Safely on Track

Appropriate methods must be selected for arranging and managing work within the *Rail Corridor*.

The *Protection Officer* must tell affected workers about the *Protection* arrangements.

### 7.1 Running Lines in the Network Outside Depots and Sidings

Work in the *Danger Zone* must be *Protected* by using one or more of the following:

- 3001 Local Possession Authority.
- 3005 Track Occupancy Authority.
- 3009 Track Work Authority.
- 3011 Absolute Signal Blocking.
- 3013 Lookout Working.
- 3023 Train Order System Blocking

The preferred methods of working on *Track* are:

- *Local Possession Authorities*; and
- *Track Occupancy Authorities*.



**NOTE:** Each *Work on Track* method has mandatory minimum safety measures. However, additional safety measures may be identified through risk assessment

### 7.2 In Depots and Sidings

#### 7.2.1 Depots

If *Rail Traffic* needs to be excluded from a work area within a Depot, the *Protection Officer* must get permission from the person in charge of the Depot.

The *Protection Officer* must make arrangements with the person in charge of the Depot to prevent *Unauthorised Rail Traffic* entry into the work area.

The person in charge of the Depot must ensure *Unauthorised Rail Traffic* entry into the work area is prevented.

### 7.2.2 Sidings

Where there is not a person in charge of the *Sidings*, the *Protection Officer* must make arrangements with:

- the *Network Controller*, or
- the person responsible for giving entry into the *Siding*.

## 8. Local Possession Authority (LPA)

An *LPA* is applied in accordance with Rule 3001 Local Possession Authority.

*LPA*'s are used to close a defined portion of *Track* for a specified period.

An *LPA* is *Issued* exclusively to the *Possession Protection Officer*.

At all times, there must be a nominated *Possession Protection Officer* for the *LPA*.

Work within the portion of *Track* included in the *LPA* limits must only be done with the *Possession Protection Officer's* approval.

A number of separate work groups, *Associated Rail Traffic* and equipment may occupy the portion of *Track* defined by the *LPA*.

A *Possession Protection Officer* is responsible for coordinating the rail safety component of worksite *Protection*.

The *Track* may be broken or *Obstructed*.

Unless authorised for an *Emergency* the intention to take an *LPA* must be *Advertised*.

## 9. Track Occupancy Authority (TOA)

A *TOA* is applied in accordance with Rule 3005 Track Occupancy Authority.

*TOA*'s are used to close a defined portion of *Track* for a specified period.

A *TOA* is *Issued* to the *Protection Officer* and gives *Exclusive Occupancy*.

A single work group, including that group's equipment, and *Associated Rail Traffic* may occupy the portion of *Track* defined by the *TOA*.

The *Track* may be broken or *Obstructed*.

## 10. Track Work Authority (TWA)

A *TWA* is applied in accordance with Rule 3009 Track Work Authority.

*TWA*'s are used to occupy a defined portion of *Track* between *Rail Traffic* movements.

A *TWA* is *Issued* to the *Protection Officer* who must manage the passage of *Rail Traffic* through the worksite.

A *TWA* does not give *Exclusive Occupancy* of the defined portion of *Track*.

A *TWA* does not does not permit the use of *Associated Rail Traffic*.

The *Track* may be broken or *Obstructed* but must be restored and cleared for *Rail Traffic* transit as necessary.

## 11. Absolute Signal Blocking (ASB)

An *ASB* is applied in accordance with Rule 3011 Absolute Signal Blocking.

*ASB* is a method of working in the *Danger Zone* by maintaining *Controlled Absolute Signals* at STOP to exclude *Rail Traffic* from a portion of *Track*.

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

*ASB*'s are *Issued* to *Protection Officer*'s and give *Exclusive Occupancy* for the agreed period of time.

The *ASB* method:

- must not be used where a *Work on Track Authority* is in place; and
- must be applied to *Controlled Absolute Signals* only.

*ASB* may be used:

- 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);
- for minor signalling maintenance activities;
- at *Level Crossings*, to allow vehicles to cross the *Track*; or
- to allow vehicles to directly cross the *Track*.

If *ASB* is used one worker may work alone. In this case, that worker must be a *Protection Officer*.

## 12. Train Order System Blocking (TOSB)

*TOSB* is applied in accordance with Rule 3023 Train Order System Blocking.

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

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

*TOSB* may be used only:

- to allow livestock to cross the *Track*;
- for work not requiring tools;
- for work using *Light Tools or Devices* 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*.



## 13. Lookout Working

*Lookout Working* is applied in accordance with Rule 3013 Lookout Working.

*Lookout Working* is used to give warning of approaching *Rail Traffic* to workers in or near the *Danger Zone*.

The *Lookout Working* method must not be used for work on overhead wiring, or work that breaks the *Track* or alters *Track* geometry or structure.

*Lookout Working* may be used for:

- minor short-term work; and
- work requiring the use of *Light Tools or Devices* which can be easily and immediately removed from the *Track* by **one worker** without mechanical assistance;
- inspections in the *Danger Zone*; or
- work conducted in the *Rail Corridor*, but outside of the *Danger Zone* that may intrude into the *Danger Zone*.

Work in the *Danger Zone* using the *Lookout Working* method must be done in daylight hours only, where visibility allows.

Workers must be able to remove themselves, tools and materials to a *Safe Place* immediately the warning of approaching *Rail Traffic* is received.

## 14. Walking in the Danger Zone

Workers walking in the *Danger Zone* must apply Rule 2001 Walking in the Danger Zone

Walking in the *Danger Zone* is:

- walking from place to place in the *Danger Zone*; and
- doing no work other than placing or removing *Protection* for a worksite or *Rail Traffic*; or visual inspection of *Track*.

Where workers must walk in the *Danger Zone*:

- an easily-reached *Safe Place* must be available; and
- visibility conditions must allow enough *Sighting Distance* for workers to reach a *Safe Place* before the arrival of *Rail Traffic*.

## 15. References

2001 Walking in the Danger Zone

3001 Local Possession Authority

3005 Track Occupancy Authority

3009 Track Work Authority.

3011 Absolute Signal Blocking

3013 Lookout Working.

3023 Train Order System Blocking

## 16. Effective Date

1 Oct 2016