

Network Safeworking Rules and Procedures

Using Standing Rail Traffic for Protection

Procedure Number: 9020



Brookfield
Rail

Using Standing Rail Traffic for Protection

Procedure Number: 9020

Document Control Identification

Document title	Number	Version	Date
9020 – Using Standing Rail Traffic for Protection		1.0	31 March 2016

Document History

Publication version	Effective date	Page(s) affected	Reasons for and extent of change(s)
9020 – Using Standing Rail Traffic for Protection	4 May 2016		

Authorisation



Adam Sidebottom
Rail Safety Manager
Brookfield Rail
31 March 2016



DISTRIBUTION AND CHANGE: Brookfield Rail maintains the master for this document and publishes the current version of the Brookfield Rail website. Any changes to the content of this publication require the version number to be updated. Changes to this publication must be approved according to the procedure for developing Brookfield Rail products.

To view the latest version of this document visit www.brookfieldrail.com

Table of Contents

Glossary for this Procedure	4
1. Purpose	6
2. General	6
3. Communication with Network Control	7
4. Using Rail Traffic to Provide a Position of Safety	7
4.1 The Network Controller	7
4.2 Rail Traffic Crew	7
4.3 Protection Officer	8
4.4 Extending the Time for Work	8
4.5 Departing the Worksite	8
5. Working Under Standing Rail Traffic	9
5.1 Rail Traffic to Continue	10
6. Using the Rail Traffic for Accessing Worksites	10
6.1 Rail Traffic Crew	10
6.2 Protection Officer	10
6.3 Departing the worksite	11
7. Keeping Records	11
8. References	11
9. Effective Date	11

Glossary for this Procedure

<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>Automatic Brake</i>	A brake which operates automatically in the event of a reduction of Brake Pipe pressure through any cause.
<i>Competent Worker</i>	A worker certified as competent to carry out a relevant task.
<i>Complete</i>	Rail traffic where the consist has not parted.
<i>Consist</i>	A listed order of the vehicles arranged to make up a complete train.
<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>Foul</i>	In a position to obstruct rail traffic on adjacent lines.
<i>Fulfil</i>	To advise the Network Controller that the instructions on, and associated activities for, an Occupancy Authority have been completed and can be terminated.
<i>Handsignal</i>	A signal given by hand or lights movements, hand signals may be with or without flags.
<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>Location</i>	A place in the Network with a designated name, identification number, or signalling reference.
<i>Main Line</i>	The running line (not including Loops) normally used for running rail traffic through and between locations
<i>Network</i>	A combination of track and other associated infrastructure controlled by Brookfield Rail.
<i>Network Control Diagram</i>	A diagram used by Network Controllers showing operational information for a Rail Traffic control area, also known as a Network Control graph to create a permanent record.
<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>Permanent Record</i>	A record made in writing or in an electronic system, and kept for reference and audit.
<i>Platform</i>	A designated raised or level area, next to the line, that allows passengers to enter and leave trains.
<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>Rail Traffic Integrity</i>	The requirements that must be met for rail traffic to be deemed to be fit for purpose as required by Brookfield Rail and Accreditation requirements to travel in the Network.
<i>Restraint Authority</i>	The Restraint Authority directs Rail Traffic not to depart the location irrespective of any available Proceed Authority.
<i>Safe Place</i>	<p>A Safe Place is:</p> <ul style="list-style-type: none"> • where there is at least three metres clearance from the nearest Running Line; • on a Platform behind the safety lines; • within a purpose-built refuge or shelter; • where a structure or physical barrier has been erected to provide a position of safety; or • immediately in front of stationary and Secured Rail Traffic.
<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>Secured</i>	To safeguard against accidental or unauthorised access or movement.
<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>Travel</i>	Planned or purposeful movement from one location to another.

1. Purpose

The object of this Procedure is to detail how this method is used to provide a *Safe Place* for workers in the *Danger Zone*, by stopping *Rail Traffic* on the *Main Line*. In addition, it allows *Rail Traffic* to transport workers to a worksite.

2. General

Some areas of the *Network* are not able to be reached safely; many *Locations* have no *Safe Place* for workers and repair work may need to be carried out on rail vehicles or the *Track* under the standing *Rail Traffic*.

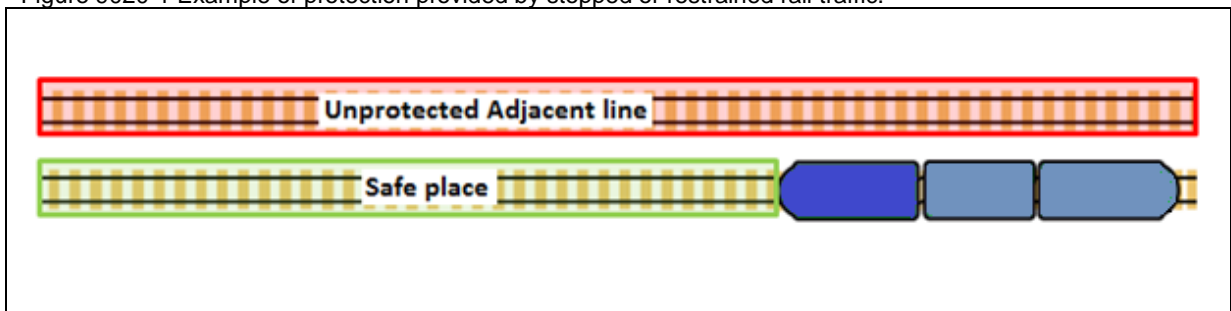
To enable minor work to be carried out, this Procedure may be applied.

Using *Rail Traffic* to provide *Protection* should only be used in circumstances where it is not reasonably practicable to use a *Protection* method as prescribed in Rule 3000 Planning Work in the Rail Corridor.



WARNING: The *Safe Place* created by the *Rail Traffic* prevented from moving does not apply to any *Adjacent line*.

Figure 9020-1 Example of protection provided by stopped or restrained rail traffic.



3. Communication with Network Control

The *Protection Officer* must contact the *Network Controller* and give the following details:

- their name;
- their *Track* access permit number;
- the type of work that is going to be carried out;
- the *Location* of the work; and
- the anticipated time for completion of the task.

4. Using Rail Traffic to Provide a Position of Safety



WARNING: *Rail Traffic* being used to provide a position of safety must reliably activate *Track-Circuits*, or the *Rail Traffic Crew* is in possession of an *Authority for the Section*.

4.1 The Network Controller

The *Network Controller* must:

- give permission before this method of *Protection* is used;
- advise the *Protection Officer* which *Rail Traffic* is to *Travel* to the worksite;
- agree with the *Protection Officer*, the time required to do the work;
- tell the *Rail Traffic Crew* the *Location* of the worksite; and
- advise *Rail Traffic* on the line, that workers will be working using *Rail Traffic* to provide a *Safe Place*.

4.2 Rail Traffic Crew

The *Rail Traffic Crew* must:

- stop 20 metres short of the worksite, to enable the workers to detrain and move forward to the worksite;
- advise the *Network Controller* on their arrival at the worksite; and
- place the *Rail Traffic* into neutral and apply a full application of the *Automatic Brakes*.

4.3 Protection Officer



WARNING: The workers shall remain on the *Track* which is *Protected* by the stationary *Rail Traffic*. They are not permitted to walk across to the *Adjacent* line or let equipment or tools *Foul* the *Adjacent* line unless the workers are *Protected* in accordance with Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines.

The *Protection Officer* must ensure that the *Rail Traffic Crew*:

- places the *Rail Traffic* into neutral; and
- makes a full application of the *Automatic Brakes*.

4.4 Extending the Time for Work

Where the work is likely to overrun the anticipated time, the *Network Controller* must be advised and a decision made to continue, or to make the area safe and finish the work at a later time.

4.5 Departing the Worksite

Once work is completed, the *Protection Officer* will return to the *Rail Traffic*.

The *Rail Traffic Crew* shall contact the *Network Controller* and advise that they are leaving the worksite.



NOTE: If work is being carried out beyond a *Platform*, and the positioning of the railcar would mean that the railcar is partially *Platformed*, then the whole of the railcar is to remain at the *Platform*.

5. Working Under Standing Rail Traffic

Using standing *Rail Traffic* for *Protection* is permitted for repairs to failed *Infrastructure* and rail vehicles where it would be unsafe for *Rail Traffic* to continue until the necessary repairs are carried out.



NOTE: Failed *Infrastructure* may be a broken rail that is under the *Rail Traffic Consist*.

Where possible, and it is safe to do so, the *Rail Traffic Consist* should be divided and *Secured*, in accordance with Rule 4003 Rail Traffic Integrity, to enable the work to be carried out without a rail vehicle standing over the failed *Infrastructure*, or the rail vehicle requiring work should be isolated from the remainder of the *Consist*.

The *Competent Worker* carrying out the repairs must advise the *Network Controller* that:

- Standing *Rail Traffic Protection* is required;
- the reasons why; and
- the anticipated duration of the work.

The *Network Controller* must *Issue a Restraint Authority*, in accordance with Rule 4001 Protecting Rail Traffic, to the *Rail Traffic Crew*



NOTE: Where the *Rail Traffic* is to be divided for the work, the *Restraint Authority* must not be *Issued* until the *Rail Traffic Consist* has been divided and is again stationary.

After the *Rail Traffic Crew* is in possession of the *Restraint Authority* the *Competent Worker* carrying out the repairs must request the *Rail Traffic Crew* to apply three step protection to the *Rail Traffic*.

Three step protection is:

- a full application of the *Automatic Brakes*;
- the controller placed in neutral; and
- the generator field switch turned off.

Where the *Rail Traffic* is a Railcar set without a generator field switch, three step protection is:

- a full application of the *Automatic Brakes*;
- the controller placed in neutral; and
- the park brake on.

Work must not start until confirmation from the *Rail Traffic Crew* that the three step protection has been applied.

5.1 Rail Traffic to Continue

The *Competent Worker* must advise the *Network Controller* when the *Infrastructure* or rail vehicle has been repaired sufficiently for the *Rail Traffic* to continue safely.

The *Network Controller* will then *Cancel* the *Restraint Authority* held by the *Rail Traffic Crew*.

The *Competent Worker* will advise the *Rail Traffic Crew* when it is safe to remove the three step protection.

Where the *Consist* was divided for the repairs the *Consist* must be recoupled and *Rail Traffic Integrity* re-established before the *Rail Traffic* continues.

6. Using the Rail Traffic for Accessing Worksites

6.1 Rail Traffic Crew

The *Rail Traffic Crew* must:

- stop 20 metres short of the worksite, to enable the *Competent Worker* to detrain and move forward to the worksite; and
- advise the *Network Controller* on arrival at the worksite.

The *Rail Traffic Crew* can depart the worksite only after receiving a *Handsignal* from the *Protection Officer*.

6.2 Protection Officer

Where a *Competent Worker* is working alone, that *Competent Worker* will be the *Protection Officer*.

The *Protection Officer* must:

- complete a radio check with the *Network Controller*, and
- when ready, give an “all clear” *Handsignal* to the *Rail Traffic Crew*.

The *Protection Officer* shall agree with the *Network Controller* on the time to be picked up if the communications fail.

The *Protection Officer* must not move from the position of safety until the nominated *Rail Traffic* has stopped, to take them from the worksite.

6.3 Departing the worksite

Once work has been completed, the *Protection Officer* shall contact the *Network Controller* and advise that the work is complete.

The *Network Controller* will arrange for the *Protection Officer* to be picked up by the next available *Rail Traffic*.

The *Rail Traffic Crew* who will pick up the *Protection Officer* from the worksite, shall stop 20 metres short of the worksite and advise the *Network Controller*.

Once the *Protection Officer* is on the *Rail Traffic*, the crew shall contact the *Network Controller* and advise that they are leaving the worksite, and the *Network Controller* will make a notation on the *Network Control Diagram*.

7. Keeping Records

The *Network Controller* and the *Protection Officer* must make a *Permanent Record* of the *Protection* arrangements.

8. References

3000 Planning work in the rail corridor

4001 Protecting Rail Traffic

4003 Rail Traffic Integrity

9010 Protecting Work from Rail Traffic on Adjacent Lines

9. Effective Date

4 May 2016