

Network Safeworking Rules and Procedures

Using Railway Track Signals

Procedure Number: 9004



Brookfield
Rail

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Glossary for this Procedure

<i>Brookfield Rail</i>	Brookfield Rail Pty. Ltd.
<i>Competent Worker</i>	A worker certified as competent to carry out a relevant task.
<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>Fixed Signal</i>	A signal that is located permanently near the line.
<i>Handsignal</i>	A signal given by hand or lights movements, hand signals may be with or without flags.
<i>Handsignaller</i>	A Competent Worker who gives handsignals to rail traffic crew
<i>Location</i>	A place in the Network with a designated name, identification number, or signalling reference.
<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>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>Railway Track Signal (RTS)</i>	A device attached to a rail that explodes on impact, used to attract attention of rail traffic crews.
<i>Restricted Speed</i>	Restricted speed is a speed that allows rail traffic to stop short of an obstruction within half the distance of clear track that is visible ahead. Restricted speed must not exceed 25 km/h.
<i>Secure</i>	To place and keep something in a known or prepared place or position to safeguard it against accidental or unauthorised access or movement.
<i>Track</i>	The combination of rails, rail connectors, sleepers, ballast, points and crossings.

Travel

Planned or purposeful movement from one location to another.

Whistle

A device such as a bell, whistle, siren, horn or hooter, fitted to rail traffic to give audible warning.

1. Purpose

This Procedure outlines how *Railway Track Signals* are used to warn *Rail Traffic Crews*.

2. General

Railway Track Signals consist of an orange plastic disc containing a chemical composition and is sealed. A wire piece is attached and is used to *Secure* the *Railway Track Signal* to the *Track*.

When the *Rail Traffic Travels* over the *Railway Track Signal* a chemical reaction takes place due to the pressure and a loud noise is created.

Railway Track Signals are used to protect workers, worksites and obstructions on *Track* in the *Network*.

The number of *Railway Track Signal* explosions together with associated signs and flags indicates what *Rail Traffic Crews* must do.

3. Railway Track Signal Response Table

Figure 9004-1 RTS response table.

Number of explosions	Rail Traffic Crew response
<p style="text-align: center;">Two</p>	<p>Sound one long <i>Whistle</i>.</p> <p>Reduce to and <i>Travel at Restricted Speed</i>.</p> <p>Look for and obey any warning signals.</p> <p>In the absence of any warning or <i>Handsignal</i>, be prepared to stop within 2500 metres.</p>
<p style="text-align: center;">Three</p>	<p>Sound one long <i>Whistle</i>.</p> <p>Stop immediately.</p> <p>If not advised by a <i>Protection Officer</i> as to the cause, contact the <i>Network Controller</i>.</p>

3.1. Responding to a Single Railway Track Signal

If Rail Traffic has not previously travelled over any Railway Track Signals and explodes a single Railway Track Signal the Rail Traffic Crew must:

- Sound one long *Whistle*.
- Reduce to and *Travel at Restricted Speed*.
- Look for and obey any warning signals.
- tell the *Network Controller*.
- In the absence of any warning or *Handsignal*, be prepared to stop within 2500 metres.

If Rail Traffic has already travelled over Two Railway Track Signals and explodes a single Railway Track Signal the Rail Traffic Crew must:

- Sound one long Whistle.
- Stop immediately.
- If not advised by a Protection Officer as to the cause, contact the *Network Controller*.

4. Placing Railway Track Signals



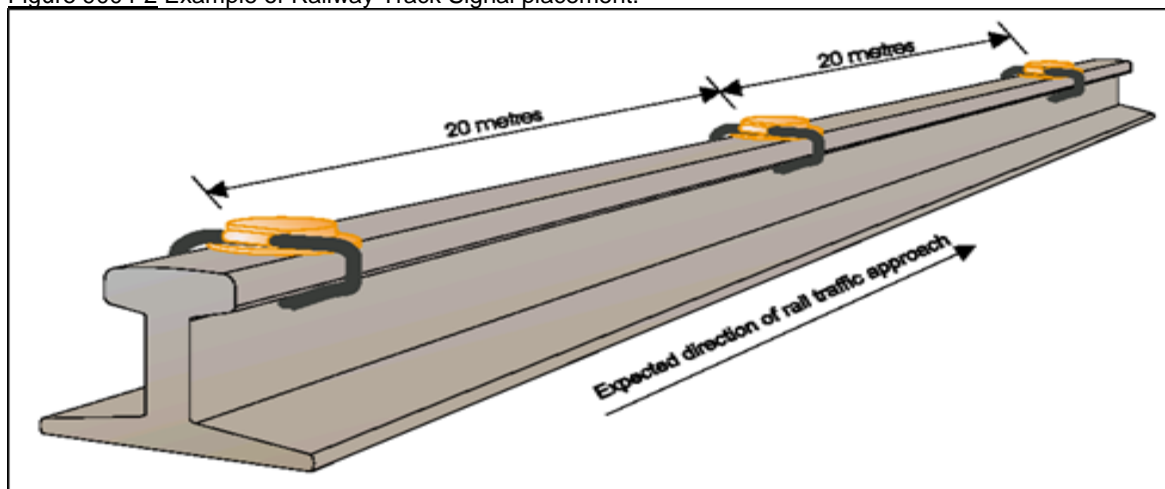
WARNING: Except in Emergencies, do not use Railway Track Signals:

- **underground;**
- **in tunnels;**
- **in steep-sided cuttings;**
- **within 20 metres of workers; or**
- **where prohibited by Brookfield Rail.**

Competent Workers must place *Railway Track Signals*:

- on all rails of the line to be *Protected*, including all 3 rails where there is dual gauge track:
 - opposite each other to ensure they explode simultaneously;
- on the rail at least 20 metres before the *Handsignaller's* position;
- on the departure side of *Fixed Signals*;
- on the approach side of stop signs, stop ahead signs, flags and *Handsignallers*;
- centrally on the railhead with the clasp facing towards the expected direction of *Rail Traffic* approach;
- by bending the clasps around the railhead; and
- 20 metres apart to ensure distinct and separate explosion.

Figure 9004-2 Example of Railway Track Signal placement.



Placing of Railway Track Signals Near Public Crossings and Platforms

Railway Track Signals must not be placed within 50 metres of any *Level Crossing* or *Platform*. Where necessary, the distance must be increased beyond the *Level Crossing* or *Platform*.

5. Removal of Unused Railway Track Signals

Where the placement of *Railway Track Signals* required for *Protection* no longer exists, all unused *Railway Track Signals* must be removed from all rails and accounted for.

6. Storing Railway Track Signals

Competent Workers must:

- return unused *Railway Track Signals* to their containers; and
- keep packed *Railway Track Signals* in a *Secure* place.

7. Dealing with Failed Railway Track Signals

If *Railway Track Signals* do not explode when run over by *Rail Traffic*:

- leave failed *Railway Track Signals* on the rail;
- report the failure immediately to a supervisor; and
- if necessary, place new *Railway Track Signals* on the railhead.



NOTE: When dealing with failed *Railway Track Signals*, *Competent Workers* must refer to the *Manufacturer's Material Safety Data Sheet*.

8. References

Nil

9. Effective date

4 May 2016