Network Safeworking Rules and Procedures

Rail Traffic Integrity

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Brookfield Rail

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Glossary for this Rule

Adjacent	Near to, close to, parallel to.
Access	A designated safe way into, along, across or out of the Rail Corridor.
Access Provider	An organisation that provides and manages a Rail Network and safe method of entry to that network for Access Users.
Brookfield Rail	Brookfield Rail Pty. Ltd.
Civil Infrastructure	The track, track formation and drainage, and fixed structures beside, over or under the track. The term includes supports for overhead electric traction equipment and supports for signalling and telecommunications equipment, but not the equipment itself.
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.
Communication Device	A device that supports effective communication between Network Controllers, Rail Traffic crews, Track Workers and other Competent Workers.
Consist	A listed order of the vehicles arranged to make up a complete train.
Dangerous Goods	Materials defined under the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) ©
Driver Supervisory Systems	A system fitted to a rail vehicle that can monitor the Driver (or train) condition or performance and apply the brakes when a measured condition or performance parameter violates a required state or limit.
Electrical Infrastructure	may include: Equipment and systems for supplying and distributing electricity Wires, cables, electrical equipment, electrical switch rooms, signalling and substations.
Fit for Purpose	Able to be used for the function required.
Handbrake	A device to secure a rail vehicle against movement.
Infrastructure	See civil infrastructure; electrical infrastructure; signalling infrastructure and telecommunications infrastructure.
Location	A place in the Network with a designated name, identification number, or signalling reference.
Main Line	The running line (not including Loops) normally used for running rail traffic through and between locations
Marshal	To arrange the order of vehicles in a train's consist.

Motive Power Unit	A rail vehicle used to provide the power to move itself or other vehicles.
Network	A combination of track and other associated infrastructure controlled by Brookfield Rail.
Network Controllers	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.
Operator's Representative	A person authorised by an above rail or below rail Operator to act on their behalf.
Protection	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.
Restrain	To prevent movement of rail traffic with signals, signalling equipment, blocking facilities, or the issue of a written warning.
Restricted Speed	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.
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.
Rail Traffic Integrity	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.
Running Line	A line (other than a siding) that is used for through movement of rail traffic, not normally used for stabling rail vehicles.
Secure	To safeguard against accidental or unauthorised access or movement.
Signalling and Communications Infrastructure	Signalling equipment and telecommunications equipment used as part of the safeworking and operating systems of the Network.
Track	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
Track Workers	Competent rail safety workers whose primary duties are associated with work on or around infrastructure in the Rail Corridor.
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.
Work Out of Service	To work rail traffic to a suitable yard, service depot, siding or location where rolling stock can leave the running line for repair or replacement of vehicle equipment.

1. Purpose

The purpose of this Rule is to provide information to *Rail Traffic Crews* about requirements for ensuring *Rail Traffic* is *Fit for Purpose* before *Accessing*, and during *Travel* in the *Network*.

2. General

Rail Traffic must identifiable and comply with *Brookfield Rail's* gauge outline in accordance with the W110-400-001 Standard Gauge Mainline Code of Practice Track & Civil Infrastructure and W110-400-002 Narrow Gauge Mainline Code of Practice Track & Civil Infrastructure.

Rail Traffic Crews must not, without authority, bypass, disconnect or turn off any device provided for the safe operation of *Rail Traffic*.

Prior to entering the *Network*, *Rail Traffic Crews* must ensure that all necessary brake tests have been performed, in accordance with *Brookfield Rail's Network Safeworking rules and Procedures* Appendix instruction Automatic Air and Vacuum Brake Instructions, and equipment is within specified limits.

Details of the *Rail Traffic Consist* must be provided to the *Network Controller*, by the *Operator's Representative,* prior to the *Rail Traffic* departure.

Where the *Rail Traffic Consist c*hanges en-route the details must be provided to the *Network Controller*, by the *Operator's Representative,* prior to the *Rail Traffic* departure from that location.

Rail Traffic Integrity must be re-established whenever the *Consist* changes. *Rail Traffic Integrity* must be documented and maintained.

Loading carried on *Rail Traffic* must be *Secure* and *Restrained* safely throughout the journey.

2.1 Testing Equipment

Prior to entering the *Network*, *Rail Traffic Crews* must ensure that the following equipment is fully operational:

- Speedometer, if this can be checked;
- *Motive Power Unit* lights;
- *Motive Power Unit Whistle*;
- *Communications Equipment*;
- *Driver Supervisory Systems*; and
- *End of Train Marker*.

2.2 Dangerous Goods

Before *Rail Traffic Travels* in the *Network*, the classes of *Dangerous Goods* and the identification numbers of vehicles carrying *Dangerous Goods*, must be recorded in the *Consist* documentation.

NOTE: *Dangerous Goods* must be loaded, labelled and *Marshalled* in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code)©.

3. Brakes

3.1 Holding Rail Traffic Stationary

Rail Traffic braking systems must be capable of stopping and holding the *Rail Traffic* stationary in all *Network* conditions applicable to the *Route*.

3.1.1 Security of Rail Traffic Left on Running Lines

Whenever it is necessary for *Rail Traffic,* or a portion of *Rail Traffic,* to be left unattended on a *Running Line* for longer than 30 minutes, in addition to the full application of the automatic brake, *Handbrakes* must be applied as follows:

Figure 4003-1 Rail Traffic handbrake application table

Section of line	Percentage of handbrakes to be applied
All NG Main Lines	100 per cent
Dual gauge Kwinana-Avon Yard	33 per cent
SG Avon Yard-Kalgoorlie	50 per cent
SG Kalgoorlie-Esperance	100 per cent
SG Kalgoorlie-Leonora	100 per cent
All crossing loops	33 per cent

Vehicles not provided with *Handbrakes* must, where necessary, be chocked to meet the requirements shown above.

3.2 Abnormal or Defective Brakes

If during *Travel* there is an abnormal application of brakes or the braking performance is inadequate, the *Rail Traffic Crew* must:

- bring the *Rail Traffic* to a complete Stop;
- advise the *Network Controller*;
- if necessary, apply *Protection* for the *Rail Traffic* in accordance with Rule 4001 Protecting Rail Traffic;
- if possible, determine the cause of the application or the extent of the defect;
- if possible, remedy the cause of the application or defect; and
- tell the *Network Controller* when the journey has been resumed or if the defect cannot be remedied.

3.3 Handbrakes and Securing Devices

Equipment used for *Securing* rollingstock must be tested before rollingstock is detached from a *Motive Power Unit* or a continuous brake system.

If a vehicle without working *Handbrakes* needs to be detached and *Secured* it must be coupled to a vehicle that has working *Handbrakes* and can *Secure* the combined weight of both vehicles.

4. Rail Traffic Safety Management Systems

Rail Traffic Safety Management Systems include:

- Speedometer; or
- Annett's Key System.

5. Driver Supervisory Systems

Driver Supervisory Systems include:

- Vigilance Control;
- Detonator Detector System; or
- Automatic Train *Protection* System.

6. Defective Equipment

Where any Safety Management System fails en-route, the *Rail Traffic Crew* must obtain the *Operator's Representative* approval to continue.

The *Network Controller* must be advised by the *Rail Traffic Crew* of:

- the system failure; and
- the *Operator's Representative* approval to continue.

6.1 Speedometer Failure

Where approved to continue by their *Operator's Representative*, affected *Rail Traffic Crews* must advise the *Network Controller* of the approval and ensure that permissible speeds are not exceeded and may continue to *Travel* until:

- the *Motive Power Unit* is *Remarshalled* at the first suitable *Location*;
- the equipment can be repaired or replaced; or
- the *Motive Power Unit* is *Worked Out of Service*.

6.2 Driver Supervisory Systems

If *Driver Supervisory Systems* in the leading *Motive Power Unit* is faulty and needs to be isolated during *Travel*, the *Rail Traffic Crew* and the *Network Controller* must confer to determine what actions are required to ensure safety of the *Rail Traffic* and *Workers*.

NOTE: Actions to ensure safety of the *Rail Traffic* may include:

- **getting a second crew member for driver only operation;**
- **reduction of speed; or**
- ***Travel* at *Restricted Speed*.**

If the affected *Motive Power Unit* cannot continue to *Travel* safely, it must be:

- *Remarshalled* at the first suitable *Location*; or
- *Worked Out of Service*.

7. Defective Vehicles

WARNING: Where there is a risk of being struck by *Rail Traffic* on *Adjacent lines*, the *Rail Traffic Crew* must arrange *Protection* in accordance with Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines.

WARNING: *Adjacent* lines may be under the control of different *Network Controllers* or *Access Providers*.

If the *Rail Traffic Crew* becomes aware that one or more of their vehicles may be defective, the crew must:

- stop if necessary;
- tell the *Network Controller*;
- *Protect* the *Rail Traffic*, if required; and
- inspect *Rail Traffic* for fault or failure, or if this is not possible, arrange for inspection.

7.1 Inspecting and Managing Defects

WARNING: If the *Rail Traffic Crew* suspect that a vehicle defect may have caused damage to *Infrastructure* the *Rail Traffic Crew* must tell the *Network Controller*.

If the inspection confirms that there is a defect, the *Rail Traffic Crew* must tell the *Network Controller*:

- the nature of the defect; and
- if the defect can be remedied on site.

If the *Rail Traffic Crew* considers that the defective vehicle cannot *Travel* normally, the *Rail Traffic Crew* or *Operator's Representative* must determine:

- the vehicle's fitness for *Travel*;
- any restrictions to be placed on the vehicle for *Travel*; or
- the proposed plan for removing the vehicle from *Running Lines*.

If the defective vehicle is able to *Travel*, the *Rail Traffic Crew* must tell the *Network Controller* about operating restrictions that apply.

If the vehicle is to be detached, the *Rail Traffic Crew* must:

- advise the *Network Controller* of the details of the vehicle including any *Dangerous Goods* and their defects;
- jointly agree with the *Network Controller*, as to the *Location* of where the vehicle is to be detached;
- *Secure* the vehicle at the agreed *Location*; and
- place red NOT TO GO cards on the vehicle.

Any equipment that has been detached from a vehicle must be moved to a position where it cannot be struck by *Rail Traffic*.

The *Network Controller* must be advised of any detached equipment, and if the detached equipment cannot be moved *Clear* of the line.

8. References

4001 Protecting Rail Traffic

9010 Protecting Work from Rail Traffic on Adjacent Lines.

W190-400-001 Standard Gauge Mainline Code of Practice Track & Civil Infrastructure

W190-400-002 Narrow Gauge Mainline Code of Practice Track & Civil Infrastructure

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) ©

Automatic Air and Vacuum Brake Instructions

9. Effective Date

4 May 2016