Network Safeworking Rules and Procedures

Rail Traffic Integrity

Rule Number: 4003

Arc Infrastructure maintains the master for this document and publishes the current version on the Arc Infrastructure website. All changes and updates to the Network Safeworking Rules and Procedures are authorised by the Arc Infrastructure Rule Book Committee. This document is uncontrolled when printed.

Document History

Version	Effective Date	Pages updated	Reasons for change
2.01	21 11 2022	3	Review

Table of Contents

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 be identifiable and comply with *Arc Infrastructure*'s gauge outline in accordance with the W190-400-001 Standard Gauge Code of Practice Track & Civil Infrastructure and W190-400-002 Narrow Gauge 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 *Arc Infrastructure*'s instruction Automatic Air 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* changes 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's* approval to continue.

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

- the system failure; and
- the *Operator's Representative*'s 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 Disabled Rail Traffic

9010 Protecting Work from Rail Traffic on Adjacent Lines

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

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

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

Automatic Air Brake Instructions

9. Effective Date

21 November 2022