

PUBLIC TRANSPORT AUTHORITY
SAFEWORKING RULES AND PROCEDURES

3019
TRACK
VEHICLES

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1. PURPOSE

The purpose of this rule is to prescribe protocols for managing *Track Vehicle* safety when traveling and carrying out work in the Public Transport Authority (PTA) *Network*.

2. GENERAL

Track Vehicles include:

- *Road Rail Vehicles (RRVs)* including:
 - *Overhead Line Equipment (OLE) Maintenance Vehicles*; and
 - *Track Inspection Vehicles*.
- *Track Maintenance Machines*, including recorder cars.

Prior notice must be given by *Special Notice* when *Track Vehicles* (other than *RRVs*) are to run or work on a *Running Line*.

Competent Workers in charge of *Track Vehicles* must act in accordance with **Rule 2027 Responsibilities of Rail Traffic Crew**.

Whistles must be used in accordance with **Rule 4007 Rail Traffic Whistles**.

3. TRACK VEHICLE APPROVAL

Track Vehicle types must be approved as *Fit For Purpose* by the Rollingstock Manager.



WARNING

If a *Track Vehicle* that does not reliably operate *Track Circuits* is to *Travel* over self-normalising *Points*, and the *Points* are in a position where they can self-normalise, the *Points* must be *Secured* for the passage of the *Track Vehicle*.

The Rollingstock Manager must provide a list of *Track Vehicles* that reliably operate the *Signalling* system and *Level Crossing Warning* equipment.

Only *Track Vehicles* approved by the Rollingstock Manager are permitted to operate under *Live OLE*.

If compatible *Track Vehicles* are fitted with approved coupling devices, they must be coupled together during *Travel*.

4. PREPARING TRACK VEHICLES FOR TRAVEL

The *Track Vehicle Operator* must make sure that the *Vehicle* is fitted with working:

- communication systems;
- brakes;
- *Headlights*;
- *Tail Lights*, or an approved *End-of-Train Marker* on the rear of the last *Vehicle*; and
- *Hazard Lights*, or flashing *Warning lights*.

The *Track Vehicle Operator* must make sure that the *Vigilance Control Device*, where fitted, is working.

The *Track Vehicle Operator* must make sure the *Vehicle* carries:

- one red and one yellow flag;
 - an approved *Track Circuit Shorting Clip*; and
 - *Safeworking forms* as necessary.
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5. OCCUPYING A RUNNING LINE

Track Vehicles may occupy a *Running Line* only with the *Authority* of the:

- *Train Controller* responsible for the *Location*;
- *Possession Protection Officer (PPO)* in charge of a *Local Possession Authority (LPA)*; or
- *Protection Officer (PO)* in charge of a *Track Occupancy Authority (TOA)*.

The *Track Vehicle Operator* must use a *Track Circuit Shorting Clip*, with the *Train Controller's* permission, to illuminate a *Track* to enable *Train Control* to confirm the *Location*.

The *Train Controller* must apply *Blocking Facilities* to protect the *Location* at which the *Track Vehicle* is to enter or be placed on the *Running Line*.

The *Train Controller* must advise the *Competent Worker* when *Blocking Facilities* have been applied. *Blocking Facilities* must be applied and removed in accordance with **Rule 6003 Blocking Facilities**.

Track Vehicles must enter or be placed on *Running Lines* only:

- within the limits of an *Occupancy Authority*; or
- at approved on and off *Track Locations* where the approach of *Rail Traffic* can be managed by *Controlled Absolute Signals*.

The *Location* where the *Track Vehicle* is to enter or be placed on the *Running Line* must be verified using one or more of the following:

- a kilometre sign and *Section*;

- a *Points Identification Number*;
- a *Signal Identification Number*;
- observance of *Points* or *Signal Aspect* change;
- recognised on/off tracking *Locations*; or
- another identifier.

Before *Travel* begins, the *Competent Worker* in charge of the *Track Vehicles* must make sure that there is *Effective Communication* between all *Track Vehicles* involved and the *Train Controller*.

6. TRACK VEHICLE TRAVEL

Track Vehicles singularly, coupled, or in *Convoy* must be worked under *Manual Block Working* conditions, in accordance with **Rule 5023 Manual Block Working**.

The *Train Controller* must tell affected *Train Controllers* of the *Travel* of a *Track Vehicle*.

Travelling Track Vehicles must have a *Competent Worker* in charge of the movement in the lead *Vehicle*.

In double line and multiple line areas, *Track Vehicles* must *Travel* on the correct *Running Line*.

Fixed Signals must be passed at Stop in accordance with **Rule 6013 Passing Fixed Signals at Stop**.

Approved *Track Vehicles Travelling* on *Signal* indications must be supervised by a *Worker* who is competent in the relevant *System of Safeworking*.

Where the *Competent Worker* in charge of the *Track Vehicle* is unfamiliar with the *Route*, a *Competent Worker* who is familiar with the *Route* must accompany the *Track Vehicle* in accordance with **Procedure 9006 Piloting Rail Traffic**.

The *Competent Worker* must inform the *Train Controller* about:

- the number and types of *Track Vehicles* in a movement; and
- the identification numbers and order of all *Vehicles* in the *Convoy*.

As necessary during *Travel*, the *Competent Worker* in charge of the movement must:

- obey instructions from the *Train Controller*;
- report to the *Train Controller* entry and clearance of *Sections* as they occur;
- tell other *Track Vehicle Operators* in the *Convoy* about conditions relating to the movement;
- tell the *Train Controller* when the limits of the *Authority* have been *Cleared* by the rearmost *Vehicle*;
- make sure that *Points* are set correctly and *Secured* for the movement;
- be alert for *Workers* in the *Rail Corridor*, and

- get the *POs Authority* before entering into a *Work on Track Authority* area or traversing a *Worksite* within a *Work on Track Authority*.

6.1. AUTHORITY FOR ROAD RAIL VEHICLES TO TRAVEL

Road Rail Vehicles (RRV) must be *Authorised to Travel* on a *Road Rail Vehicle Authority (RRVA)* issued by the *Train Controller* responsible for that area; or

On an *RRVA* transferred to the *Train Controller* from an adjoining area of control where the *RRV* will be moving from one area of control to another.

RRV movements between areas of control must comply with **Rule 2029 Section 5 Responsibilities of Train Controllers** and **Rule 5023 Manual Block Working**.

Where a *RRV* is *Authorised* to follow, but is not part of a *Rail Traffic* movement *Convoy*, the *Competent Worker* must not permit the *RRV* to be within 200 metres of that *Rail Traffic*.

6.1.1. Obtaining a Road Rail Vehicle Authority

The *Competent Worker* in charge of a *RRV* must obtain an *RRVA* from the *Train Controller* responsible for the area over which the *Vehicle* is to *Travel*; or

When the *RRV* is *Travelling* from one area of control to an adjoining area of control, the *Travel Authority* will continue on the *RRVA* issued.

The *RRVA* will be transferred to the *Train Controller* of the adjoining area and both *Train Controllers* will sign the *RRVA* as acceptance of the transfer.

Before *Authorising* an *RRVA*, the *Train Controller* must make sure that:

- any *Rail Traffic* holding a *Unidirectional Authority* has *Cleared* the starting point of the proposed *RRVA* and will not be returning;
- the *Competent Worker* knows about existing obstructions;
- the *Competent Worker* understands and agrees to the limits of the *RRVA*;
- they confirm *Location* by means of a *Track Circuit Shorting Clip*;
- *Blocking Facilities* have been applied to prevent *Unauthorised*, entry by *Rail Traffic* into the *RRVA* limits; and
- the *Competent Worker* is advised when *Blocking Facilities* have been applied.

Before moving into the *Section* the *Competent Worker* must:

- confirm *Blocking Facilities* have been applied by repeating back to the *Train Controller* the details of the *Blocking*;
- record the *Blocking* on the *RRVA*;
- ensure that all *Points* are correctly set; and
- obtain the *Train Controller's* verbal approval to PROCEED.

6.1.2. Road Rail Vehicle Stopping for Work

The *Competent Worker* must act in accordance with **Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines**, if the *RRV* is required to stop for work, when:

- there are *Adjacent* lines; and
- the work may encroach into the *Danger Zone* of the *Adjacent* line.

6.1.3. Fulfilling a Road Rail Vehicle Authority

The *RRVA* must be *Fulfilled* by the *Competent Worker* when all of the instructions on the *RRVA* have been carried out.

The *Train Controller* and the *Competent Worker* must endorse their copy of the *RRVA* as *Fulfilled*.

Where all of the instructions on the *RRVA* cannot be carried out then the *Train Controller* and the *Competent Worker* must endorse their copy of the *RRVA* as *Cancelled*.

6.2. AUTHORITY FOR TRACK MAINTENANCE MACHINES TO TRAVEL

Track Maintenance Machines must *Travel* only on the *Authority* of *Fixed Signals*.

Fixed Signals displayed to the first *Vehicle* apply to all *Track Maintenance Machines* in the *Convoy*.

A *Track Maintenance Machine* must not *Set Back* without the *Authority* of the *Train Controller*.

After the *Track Maintenance Machines* have passed the *Protecting Signal*, the *Train Controller* must ensure the *Protecting Signal* is at *Stop* and *Blocking Facilities* applied, in accordance with **Rule 5023 Manual Block Working**.

7. TRAVELLING IN CONVOY

No more than three (3) *Track Vehicles* are permitted to *Travel* in *Convoy*.

The *Competent Worker* in charge must ensure that *Track Vehicle Operators*:

- maintain a minimum distance of 200 metres and a maximum distance of 400 metres between *Track Vehicles*; and
- close the distance to less than 200 metres, when instructed to do so.

The *Convoy* must close the distance nominated by the *Competent Worker*.

- if the leading *Vehicle* stops;
- before entering a *Section*; and
- before *Travelling* over an *Active Control Level Crossing*.

Track Vehicle Operators in *Convoy* must maintain *Effective Communication*.

If communication is lost, the *Track Vehicle Operator* must *Travel* at *Restricted Speed*.

7.1. COMPETENT WORKER IN THE LEADING TRACK VEHICLE

The *Competent Worker* in the leading *Track Vehicle* must warn the following *Track Vehicle Operators* if the lead *Track Vehicle*:

- slows down or stops;
- approaches an *Active Control Level Crossing*; or
- approaches the *Protection* limits of a *Worksite*.

7.2. TRACK VEHICLE OPERATORS

Track Vehicle Operators must adjust the speed of *Track Vehicles* according to messages received from the *Competent Worker* or other *Track Vehicle Operators* within the *Convoy*.

Tell other *Track Vehicle Operators* in the *Convoy*:

- when pre-planned easily identified *Locations* or reference points during the journey have been reached; and
- if there is a need to slow down or stop the *Track Vehicle*.

If the *Track Vehicle Operator* is unsure of the whereabouts of the *Track Vehicles* ahead when the last reported *Location* is reached, the *Track Vehicle Operator* must *Travel at Restricted Speed*.

If the *Track Vehicle Operator* needs to stop the vehicle, the *Track Vehicle Operator* must warn following *Track Vehicle Operators* by the use of one or more of the following:

- sending two-way radio messages;
- flashing the *Track Vehicle's* lights;
- sounding the *Whistle* of the *Track Vehicle* repeatedly; or
- giving a *STOP Handsignal* at a *Safe Braking Distance* behind the *Track Vehicles*.

The *Track Vehicle Operator* must continue to give the *Warning* until acknowledged by the following *Track Vehicle Operator*.

8. TRAVELLING OVER LEVEL CROSSINGS

The *Competent Worker* in the leading *Track Vehicle* must tell the other *Track Vehicle Operators*:

- that the *Track Vehicle* is approaching a *Level Crossing*, and the following *Track Vehicle Operators* are to reduce their speed and be prepared to Stop;
- they are to close up safely and *Travel* over the *Level Crossing* as a group; and
- the *Track Vehicle Operator* must ensure that all *Track Vehicles*, in particular insulated *Track Vehicles*, *Travel* over a *Level Crossing* only if it is safe to do so.

If a *Track Vehicle* cannot reliably operate the *Signalling* system and *Level Crossing Warning* equipment as approved by the Rollingstock Manager, the *Track Vehicle Operator* must stop short of the *Level Crossing*.

Before *Travelling* over a *Level Crossing*, the *Competent Worker* must make sure that:

- the *Level Crossing* is *Clear* of all road or pedestrian traffic;
 - there is sufficient *Sighting Distance* to enable their *Vehicle* to cross; or
 - if required, they manually operate the *Level Crossing Warning* equipment.
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9. DISABLED TRACK VEHICLES

Where a *Track Vehicle* becomes disabled or causes an obstruction for any reason, it must be protected in accordance with **Rule 4001 Protecting Rail Traffic**.

10. OVERDUE TRACK VEHICLE

If a *Track Vehicle* movement is overdue the *Competent Worker* and the *Train Controller* must act in accordance with **Rule 2027 Responsibilities of Rail Traffic Crew** and **Rule 2029 Responsibilities of Train Controllers**.

11. TRAVELLING THROUGH LOCAL POSSESSION AUTHORITY OR TRACK OCCUPANCY AUTHORITY LIMITS

Only *Track Vehicles* associated with the *LPA* or *TOA* are permitted to enter the limits of the *Work on Track Authority*.

Track Vehicles entering or *Travelling* within the limits of the *Work on Track Authority* must:

- be *Piloted*; or
- receive written or verbal instructions from the *PPO* or *PO*.

Track Vehicles must only depart from the limits of the *Work on Track Authority* with the *Train Controller's Authority*.

12. TRACK VEHICLE SPEED LIMITS



WARNING

Track Vehicle Operators must *Travel* at speeds that are safe for the prevailing conditions.

The speed of a *Track Vehicle* must not exceed:

- the speed specified for the *Track Vehicles*; or
- if it is lower than the speed specified for the *Track Vehicle*, the *Track Speed*.

Track Vehicles, other than *RRVs*, must not exceed 20 km/h over a *Level Crossing*.

12.1. ROAD RAIL VEHICLES

A *RRV* must not exceed 10 km/h over *Level Crossing* or *Points*.

If a *RRV* must *Travel* behind a *Train* in a *Section*, it must travel at a *Controlled Speed*.

13. HEADLIGHTS

Headlights must be switched on during *Travel*.

Headlights must be dimmed when approaching:

- *Rail Traffic*;
 - a *Platform*;
 - a *Location* where *Shunting* is in progress; and
 - a road vehicle on a nearby road.
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14. TAIL LIGHTS

Track Vehicles must have red *Tail Lights* lit or an approved *End-of-Train Marker* during *Travel*.

15. HAZARD LIGHTS

Track Vehicles on a *Running Line* must have approved and operating *Hazard Lights*.

16. STABLING TRACK VEHICLES

In the *Electrified Area*, *Track Vehicles* must be *Stabled* in accordance with **Rule 2017 Working Around Electrical Infrastructure**.

Track Vehicles must be:

- *Clear of Running Lines*;
- *Secured* against unintended movement; or
- if *Stabled* in a *Siding*, be inside *Derail Devices*.

Track Vehicles must be *Secured* against *Unauthorised* operation and unintended movement at all times.

17. TRACK VEHICLE STOPPING FOR WORK

Track Vehicles stopping for work, other than *RRVs* must be protected using a *Work on Track Authority*.

18. KEEPING RECORDS

The *Train Controller* and the *Competent Worker* in charge of *Track Vehicles* must keep a *Permanent Record* of the details of the *Travel* of the *Track Vehicle*.

19. REFERENCE

Rule 2007 Network Communications

Rule 2017 Working Around Electrical Infrastructure

Rule 2027 Responsibilities of Rail Traffic Crew

Rule 2029 Responsibilities of Train Controllers

Rule 4001 Protecting Rail Traffic

Rule 4007 Rail Traffic Whistles

Rule 5023 Manual Block Working

Rule 6003 Blocking Facilities

Rule 6013 Passing Fixed Signals at Stop

Procedure 9006 Piloting Rail Traffic

Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines

Procedure 9016 Written Authorities and Forms

20. EFFECTIVE DATE

1 November 2018