

Network Safeworking Rules and Procedures

Planning Work in the Rail Corridor

Rule Number: 3000

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1. Purpose

This rule provides instructions designed to ensure that appropriate planning is carried out for work within the *Rail Corridor* and assessing the work for safety.

2. General

Work planned for the *Rail Corridor* must be assessed for safety and its potential to intrude into the *Danger Zone*.

Work in the *Danger Zone* must:

- not be carried out unless there is a Safe Place that can be easily reached; and
- not begin until the required safety measure is in place.

Work in the *Danger Zone* must be carried out using one of the *Protection* methods listed in this rule.

The level of safety must not be reduced:

- to allow Rail Traffic movements; or
- because of a lack of trained workers.

Workers in the *Rail Corridor* must wear long pants, long sleeved shirts and approved Personal Protection Equipment (PPE). The minimum PPE required is High Visibility clothing and Safety footwear.

Effective Communication with Network Controllers, Possession Protection Officers and Protection Officers must be maintained.

The *Protection Officer* must contact the *Network Controller* before workers enter the *Rail Corridor*.

3. Protection Officer

A worksite within or work that has potential to intrude into the *Danger Zone* must have a *Protection Officer* for the duration of the work.

The *Protection Officer* is responsible for managing the rail safety component of worksite *Protection*.

A *Protection Officer*'s primary duty and responsibility is to keep the worksite and workers safe. The *Protection Officer* must be satisfied that other work will not interfere with this duty.

The Protection Officer must:

- Compile a worksite Protection plan;
- make a Safety Assessment upon arrival at site to confirm details in the worksite Protection plan;
- brief workers about the rail safety component of worksite Protection;
- make sure that the rail safety component of the work is done safely;
- communicate with the *Network Controller* about the work and *Protection* arrangements; and
- keep records about the *Track Occupancy* and *Protection* arrangements.

4. Assessing Safety

When making a *Safety Assessment*, *Protection Officers* must consider, amongst other factors, if:

- work will affect Track under the control of different Network Controllers, Access Providers or private Siding operators;
- appropriate numbers of Competent Workers are available to protect the work;
- easily reached Safe Places are available for workers;
- the Sighting Distance and the speed of approaching Rail Traffic will allow sufficient warning time to be given by Lookout Officers;
- it is possible to close the affected line during the work;
- there will be Rail Traffic on Adjacent lines;
- Rail Traffic will travel on an Adjacent line in both directions over a Uni-Directional line
- there will be Rail Traffic between and/or within worksites;
- signals are available to protect worksites;
- other Work on Track will affect the worksites;
- there is safe passage to and from worksites;
- there is public Access to the Rail Corridor,
- there is a risk to workers from road traffic;
- the work will intrude on Level Crossings;
- the line is electrified, has power lines overhead or underneath;
- the line is Track-Circuited;
- the formation of the line and the *Location* will affect the work;
- Effective Communication is available;
- equipment used in the work will intrude into the *Danger Zone*;
- other groups need to be told about or involved in the work; and
- the potential for noise within and external to the worksite may impact on the worksite Protection.

The *Protection Officer* must regularly review safety measures and if conditions such as visibility or work *Location* changes make amendments to the worksite safety as required.

4.1 Use of Plant Near or Work Above the Danger Zone

Unless special precautions for *Protection* of the *Running Line* have been approved by *Arc Infrastructure*, an appropriate *Authority* must be used where:

- Plant is to be used and any portion of that Plant may encroach into the Danger Zone;
 or
- work is to be carried out above the *Danger Zone*.



NOTE: Special precautions may include, but not be limited to, chain link fencing, scaffolding, roofing above the *Running Line* and restrictive safety chains on *Plant*.

5. Multiple Access Providers

If the planned work will affect *Track* under the control of more than one *Access* Provider, the *Protection Officer* must get the relevant *Network Controllers*' authority.



NOTE: Protection Officers must be aware of the Protection arrangements required for Adjoining Networks.

Where necessary *Competent Workers* must be qualified in the *Adjoining Network* rules and procedures.

6. Level Crossings

If Work on Track will intrude into the Level Crossing or affect the Level Crossing operation, the Protection Officer must arrange to ensure the safety of:

- workers; and
- road, pedestrian and Rail Traffic.

7. Methods for Working Safely on Track

Appropriate methods must be selected for arranging and managing work within the *Rail Corridor*.

The *Protection Officer* must tell affected workers about the *Protection* arrangements.

7.1 Running Lines in the Network Outside Depots and Sidings

Work in the *Danger Zone* must be *Protected* by using one or more of the following:

- 3001 Local Possession Authority.
- 3005 Work on Track Authority.
- 3013 Lookout Working.

The preferred methods of *Track Occupancy* are:

- Local Possession Authorities; and
- Work on Track Authority.



NOTE: Each *Track Occupancy* has mandatory minimum safety measures. However, additional safety measures may be identified through risk assessments.

7.2 In Depots and Sidings

7.2.1 Depots

If *Rail Traffic* needs to be excluded from a work area within a Depot, the *Protection Officer* must get permission from the person in charge of the Depot.

The *Protection Officer* must make arrangements with the person in charge of the Depot to prevent *Unauthorised Rail Traffic* entry into the work area.

The person in charge of the Depot must ensure *Unauthorised Rail Traffic* entry into the work area is prevented.

Sidings

Where there is not a person in charge of the *Sidings*, the Protection Officer must make arrangements with:

- the Network Controller, or
- the person responsible for giving entry into the *Siding*.

8. Local Possession Authority (LPA)

An LPA is applied in accordance with Rule 3001 Local Possession Authority.

LPAs are used to close a defined portion of *Track* for a specified period.

An LPA is Issued exclusively to the Possession Protection Officer.

At all times, there must be a nominated Possession Protection Officer for the LPA.

Work within the portion of *Track* included in the *LPA* limits must only be done with the *Possession Protection Officer*'s approval.

A number of separate work groups, *Associated Rail Traffic* and equipment may occupy the portion of *Track* defined by the *LPA*.

A *Possession Protection Officer* is responsible for coordinating the rail safety component of worksite *Protection*.

The Track may be broken or Obstructed.

Unless authorised for an *Emergency* the intention to take an *LPA* must be *Advertised*.

9. Work on Track Authority (WoTA)

A WoTA is applied in accordance with Rule 3005 Work on Track Authority.

WoTAs are used to close a defined portion of *Track* for a specified period.

A work group, including that group's equipment, and Associated Rail Traffic may occupy the portion of Track defined by the WoTA.

The *Track* may be broken or *Obstructed*.

Only Associated Rail Traffic is permitted in a WoTA.

10. Lookout Working

Lookout Working is applied in accordance with Rule 3013 Lookout Working.

Lookout Working is used to give warning of approaching Rail Traffic to workers in or near the Danger Zone.

The *Lookout Working* method must not be used for work on overhead wiring, or work that breaks the *Track* or alters *Track* geometry or structure.

Lookout Working may be used for:

- · minor short-term work; and
- work requiring the use of Light Tools or Devices which can be easily and immediately removed from the Track by one worker without mechanical assistance;
- inspections in the Danger Zone; or
- work conducted in the *Rail Corridor*, but outside of the *Danger Zone* that may intrude into the *Danger Zone*.

Work in the *Danger Zone* using the *Lookout Working* method must be done in daylight hours only, where visibility allows.

Workers must be able to remove themselves, tools and materials to a *Safe Place* immediately the warning of approaching *Rail Traffic* is received.

11. Walking in the Danger Zone

Workers walking in the *Danger Zone* must apply Rule 2001 Walking in the Danger Zone.

Walking in the *Danger Zone* is:

- walking from place to place in the Danger Zone; and
- doing no work other than placing or removing Protection for a worksite or Rail Traffic; or visual inspection of Track.

Where workers must walk in the Danger Zone:

- an easily-reached Safe Place must be available; and
- visibility conditions must allow enough Sighting Distance for workers to reach a Safe Place before the arrival of Rail Traffic.

12. References

2001 Walking in the Danger Zone

3001 Local Possession Authority

3005 Work on Track Authority (WoTA)

3013 Lookout Working.

13. Effective Date

3 February 2020





Network Safeworking Rules and Procedures

Local Possession Authority

Rule Number: 3001

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1. Purpose

This rule details the protocols for *Issuing*, using *Local Possession Authorities (LPAs)* and how an individual worksite is *Protected* when multiple worksites are within the *LPA*. These *Authorities* are used to close a defined portion of *Track* for a specified period.

2. General

Only Network Controllers may authorise an LPA for Track under their control.

An LPA gives Exclusive Occupancy for the defined portion of Track.

Unless *Authorised* for an *Emergency*, the approval for the *LPA* must be *Advertised*. At all times, there must be a nominated *Possession Protection Officer* for the *LPA*.

To apply this rule, a minimum accreditation level of *PPO (Possession Protection Officer)* must be held in accordance with Rule 1004 Track Access Accreditation.

An LPA is Issued exclusively to the Possession Protection Officer.

A *Possession Protection Officer* is responsible for coordinating the rail safety component of worksite *Protection*.

Work within the portion of *Track* included in the *LPA* limits must only be done with the agreement of the *Possession Protection Officer*.

A number of separate work groups and their *Associated Rail Traffic* and equipment may occupy the portion of *Track* defined by an *LPA*.

3. Authorisation

Before authorising the *LPA*, the *Network Controller* must make sure that:

- another Track Occupancy is not in use within the proposed limits;
- approaching Rail Traffic can be Restrained at the ends of the Section that include the proposed limits;
- Stabled Rail Traffic not associated with the LPA, but is within the limits of the LPA, must not be authorised to move;
- Stabled Rail Traffic that is attended by Rail Traffic Crew must be issued with a Restraint Authority.
- Rail Traffic associated with the LPA, within the limits, has been identified and is being managed as agreed by the Possession Protection Officer and the Network Controller;
- the Possession Protection Officer knows about any existing Obstructions;
- Blocking Facilities have been applied, in accordance with Rule 6003 <u>Blocking</u>
 Facilities, to prevent *Unauthorised Rail Traffic* entry into the proposed limits.

Where manually *Issued* the *Network Controller* must confirm with the *Possession Protection Officer* the:

- type of work;
- intended start and finish times; and
- Location, using two or more of the following identifiers:
 - a kilometre sign and Section;
 - Station name;
 - a Points number;
 - a signal number;
 - an observance of *Points* or signal *Aspect* change;
 - permanent structures, such as a bridge, roadway or overpass, used only in conjunction with one of the above identifiers; or
 - another identifier.

Where the *LPA* is manually *Issued* the *Network Controller* must confirm the name, *Track Access* number and contact details of the *Possession Protection Officer*.

Where an existing *Track Occupancy* is in place, the *Network Controller* may *Issue* the *LPA* only if the existing *Track Occupancy* is *Fulfilled*.

4. Possession Protection Officer and Protection Officer

4.1 Possession Protection Officer

The Possession Protection Officer must:

- maintain a LPA Worksite Permit (Master);
- be responsible for the Protection of workers from Rail Traffic;
- make sure that the limits of the LPA are Protected against the entry and exit of Unauthorised Rail Traffic;
- make sure that each worksite within the LPA has a Protection Officer while work is being performed;
- establish Effective Communication with Protection Officers;
- make sure Protection Officers keep the Tracks between worksites and protecting Locations Clear of Obstructions;
- coordinate the *Protection* of all worksites within the limits of the *LPA*; and
- make sure that work in the Danger Zone does not begin before the required safety measures are in place.

4.2 Change of Possession Protection Officer

An outgoing Possession Protection Officer must tell an incoming Possession Protection Officer about the worksite Protection arrangements.

The incoming Possession Protection Officer must:

- tell affected Network Controllers about the changed contact arrangements; and
- make a Permanent Record of the handover of the LPA.

4.3 Protection Officer

There must be a *Protection Officer* present at the worksite for the period of the work.

A Protection Officer must:

- Effectively Communicate with the Possession Protection Officer,
- comply with the Possession Protection Officers instruction;
- make sure that work in the *Danger Zone* does not begin before the required safety measures are in place;
- be responsible for the *Protection* of workers from *Rail Traffic*;
- be satisfied that other work will not interfere with *Protection* duties:
- make sure the *Tracks* between worksites and protecting *Locations* are kept *Clear* of *Obstructions*;
- make sure that worksites are *Protected* against the *Unauthorised* entry and exit of *Rail Traffic*;
- tell workers about the Locations of Safe Places before work begins; and
- tell workers if the *Protection* arrangements change.

4.4 Change of Protection Officer

The outgoing *Protection Officer* must tell the incoming *Protection Officer* about the current worksite *Protection* arrangements.

Before taking charge of the worksite, the incoming *Protection Officer* must:

- confirm the current worksite *Protection* arrangements with the outgoing *Protection* Officer and the *Possession Protection Officer*,
- make a Permanent Record of the time of the worksite handover; and
- confirm that the *Possession Protection Officer* has noted the changed contact arrangements.

The *Possession Protection Officer* must confirm the handover and record the incoming *Protection Officer*'s name and contact details in the *LPA* Worksite Permit (Master).

Obtaining an LPA

The Network Controller and the Possession Protection Officer must confirm:

- the Issuing Network Control desk;
- the LPA limits;
- the *Points* to be clipped, in accordance with Procedure <u>9000 Securing and Clipping Points</u>, if required; and
- the duration of the LPA;

5.1 Where the LPA issued electronically

The Network Controller and the Possession Protection Officer must confirm:

- Authority ID;
- Sections blocked; and
- Status.

5.2 Where the LPA is issued manually

The Network Controller and the Possession Protection Officer must confirm:

- the Possession Protection Officer's name and contact details;
- a unique identifying number;
- that Blocking Facilities have been applied to prevent entry of Rail Traffic into the portion of Track within the proposed limits;
- the time of Issue; and
- the date of Issue.

The Possession Protection Officer must repeat the details back to the Network Controller.

5.3 Where other Network Controllers are affected by the LPA

The Network Controller must make sure that other affected Network Controllers are aware of the LPA.

6. Protection



WARNING: Work must not start in the *Danger Zone* until the required *Protection* is in place.

The Network Controller must apply Blocking Facilities, where available, to prevent Unauthorised Rail Traffic from entering the LPA. Where required, the Possession Protection Officer must place In-Field Protection at all points of entry to the LPA.

In-Field Protection can be one of the following:

- RTS and STOP sign;
- Track Closed Warning Device;
- RTS and Rail Clamp STOP sign; or
- Points Secured to prevent Rail Traffic entry.



NOTE: *RTS* must be used in accordance with Procedure <u>9004 Using</u> Railway Track Signals.

In-Field Protection is not required between the worksites and the end of a *Terminal Line* if the *Network Controller* tells the *Possession Protection Officer* that there are no planned *Rail Traffic* movements from that direction.

Where there is *Stabled Rail Traffic* not associated with the *LPA*, within the limits of the *LPA*, the *Possession Protection Officer* must place *In-Field Protection* to prevent entry in to the *LPA*.

The distance between the *Protecting Signal*, or signs designating, the limits of the *LPA* and a *Fixed Worksite* must not be less than 500 metres unless:

- Points can be Secured to prevent Access to the portion of Track within the LPA limits; or
- a Work on Track Authority Adjoining the entry-end limit of that LPA has also been authorised for the period of the work.

6.1 Protection for Rail Traffic Crossing the LPA

Other Rail Traffic may cross the LPA to enter or exit a Running Line, Siding or At Grade Rail Crossing, but only with the Possession Protection Officer's Authority.

If Rail Traffic crossing is authorised the Network Controller must get the Possession Protection Officer's permission for the move.

Where the *Possession Protection Officer* authorises *Rail Traffic* movements across the *LPA* the *Possession Protection Officer* must:

- arrange with the Protection Officer of any worksite within 500 metres of the crossover to be suspended;
- arrange the removal of *Protection* at the entry point of the *Route*; and
- when Rail Traffic has cleared the entry Point, make sure Protection is replaced and reinstate any affected worksite.

6.2 Adjacent Line

If the *Safety Assessment* indicates that workers need to be protected from *Rail Traffic* on *Adjacent* lines, the *Protection Officer* must arrange for *Adjacent* lines to be *Protected* in accordance with Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines.

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

6.3 Protecting Multiple Worksites

The Possession Protection Officer must:

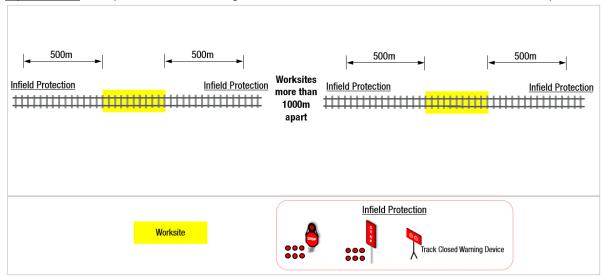
- make sure the Protection Officers protect their worksites correctly; and
- tell the *Protection Officers* if changes are required to worksite *Protection* and make sure the changes are carried out.

In-Field Protection can be one of the following:

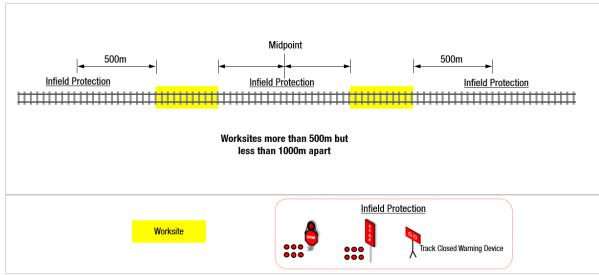
- RTS and STOP sign;
- RTS and rail clamped STOP sign; or
- Track Closed Warning Device.

Protection Officers must make sure that In-Field Protection is placed on all Rail Traffic approaches to the worksite.

Figure 3001-2 Example of Protection arrangements for individual worksites more than a 1000 metres apart.



<u>Figure 3001-3</u> Example of *Protection* arrangements for multiple worksites more than 500 metres but less than 1000 metres apart.



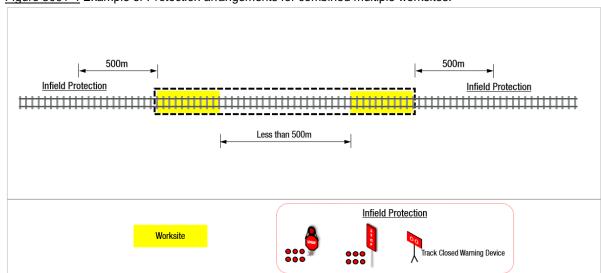


Figure 3001-4 Example of Protection arrangements for combined multiple worksites.

6.3.1 Compiling and Issuing LPA Worksite Permits

If an LPA involves one worksite only, an LPA Worksite Permit is not required.

Before work starts on the second and subsequent worksites, those *Protection Officers* must have an *LPA* Worksite Permit for the work they will supervise.

The Possession Protection Officer must:

- fill out an LPA Worksite Permit;
- record the details of the worksite including;
 - the worksite limits;
 - the intended start and finish times for the work;
 - if Rail Traffic movements are associated with the worksite;
 - the type and Location of Protection; and
 - the Protection Officer's name and contact details;
- make sure the Protection Officer has signed the LPA Worksite Permit; and
- record the LPA Worksite Permit details in the LPA Worksite Permit (Master).

6.3.2 Maintaining the LPA Worksite Permit (Master)

If the *LPA* involves more than one worksite, the *Possession Protection Officer* uses the *LPA* Worksite Permit (Master) to:

- maintain a record of LPA Worksite Permits Issued; and
- record worksite handovers between Protection Officers.

Possession Protection Officers must:

- fill out an LPA Worksite Permit (Master) that includes details about the;
 - reference details of the LPA Advertisement,
 - intended start and finish times of the LPA;
 - LPA limits;
 - number of worksites included in the LPA; and
- for each worksite, record;
 - the worksite limits;
 - the *Protection Officer's* name and contact details;
 - if Rail Traffic movements are associated with the worksite;
 - the intended start and finish times for the work;
 - the time and date when the LPA Worksite Permit is Issued; and
- if the *Protection Officer* changes, confirm and record the;
 - time of handover; and
 - incoming Protection Officer's name and contact details.

6.3.3 Extending the LPA Worksite Permit Time

If the work will not be completed within the specified time, the *Protection Officer* must get approval from the *Possession Protection Officer* for an extension of time.

If the *Possession Protection Officer* agrees to an extension, the *Possession Protection Officer* must record the:

- · new worksite end time; and
- time the extension was agreed.

6.3.4 Fulfilling a LPA Worksite Permit

When the work has been completed the *Protection Officer* must make sure:

- that Rail Traffic and equipment is Clear of the line;
- that the workgroup has cleared the worksite;
- that In-Field Protection and Points clips have been removed;
- the portion of *Track* included in the worksite permit has been *Certified* as available for use;
- the Possession Protection Officer is advised about operating restrictions that have been placed or removed; and
- the LPA Worksite Permit is Fulfilled.

The Possession Protection Officer must:

- use the LPA Worksite Permit (Master) to record that the LPA Worksite Permit has been Fulfilled; and
- ensure all Worksite Permits are Fulfilled before Fulfilling the LPA.

7. Rail Traffic

Only Rail Traffic associated with the LPA may enter the limits of the LPA.

Other Rail Traffic may cross the LPA to enter or exit a Running Line, Siding or At Grade Rail Crossing, but only with the Possession Protection Officer's agreement.

Before entering the LPA, Rail Traffic Crews must verify with the Possession Protection Officer or Delegate that the LPA is In-Effect.

7.1 Rail Traffic Entering or Travelling Within the LPA Limits

The Possession Protection Officer or Delegate must manage all Rail Traffic movement within the LPA.

Where a *Pilot* is used, the *Possession Protection Officer* or a *Delegated Protection Officer* must act as the *Pilot*.

The Possession Protection Officer must make sure that Rail Traffic associated with the LPA does not exceed the limits of the LPA.

Rail Traffic that is associated with the LPA, entering and Travelling within the LPA limits must:

- be Piloted; or
- receive written or verbal instructions from the Possession Protection Officer.

7.2 Fixed Signals

Fixed Signals within the limits of the LPA must, where possible, be placed to PROCEED for Rail Traffic movements.

Where *Fixed Signals* cannot be placed to PROCEED for *Rail Traffic* movement, they must be passed in accordance with Rule <u>6013 Passing Fixed Signals at Stop</u>.



NOTE: Inside an LPA, the Possession Protection Officer must authorise all Rail Traffic movements past Fixed Signals and would request the Network Controller to place Fixed Signals at PROCEED, the Network Controller can only place Fixed Signals at PROCEED on the request of the Possession Protection Officer.

7.3 Rail Traffic Departing the LPA

Rail Traffic may depart from the limits of an LPA only on the Authority of the Network Controller.

8. Communications with Network Control

The *Possession Protection Officer* must be the only point of contact between the *Network Controller* and work groups for matters of worksite *Protection*.

The Possession Protection Officer must tell affected Network Controllers about:

- the *Protection* arrangements;
- Protection arrangements on Adjacent lines; and
- work progress at agreed times.

The Possession Protection Officer must, if necessary, seek an extension of time.

When the agreed time limit has been exceeded by 15 minutes and *the Possession Protection Officer* has not requested an extension of time, the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

9. Fulfilling the LPA

Before Fulfilling the LPA the Possession Protection Officer must make sure and tell the Network Controller that:

- Associated Rail Traffic and all equipment has cleared the Track;
- all work groups have cleared the worksites;
- In-Field Protection has been removed;
- signals that were affected have been restored for normal use; and
- the portion of *Track* included in the *LPA* is *Certified* as available for use.

The Possession Protection Officer and the Network Controller must Fulfil the LPA.

The Network Controller must confirm with the Possession Protection Officer that Blocking Facilities can be removed.

The Network Controller must advise other affected Network Controllers that the LPA has been Fulfilled.

The Possession Protection Officer must tell the Network Controller about operating restrictions that have been placed or removed.

9.1 Work to Continue Under Another Track Occupancy

Where arrangements have been made to continue work under another *Track Occupancy* the *Protection Officer* must ensure that the *Protection* applied for the *LPA* is not removed until the new *Track Occupancy* is *Issued* and the required *Protection* for that new *Authority* is in place.

The *Network Controller* must ensure that the *Track* within the limits of the proposed *Track Occupancy*:

- is Clear of Rail Traffic; or
- is only occupied by Associated Rail Traffic permitted under that Authority.

10. Keeping Records

Network Controllers and the Possession Protection Officer must keep Permanent Records about the details of the LPA, including Protection arrangements and changes to the worksite Protection.

11. References

1004 Track Access Accreditation

4017 Overdue Occupancies

6003 Blocking Facilities

6005 Fixed Signals

6013 Passing Fixed Signals at Stop

9000 Securing and Clipping Points

9004 Using Railway Track Signals.

9010 Protecting Work from Rail Traffic on Adjacent Lines.

12. Effective Date

3 February 2020



Network Safeworking Rules and Procedures

Work on Track Authority

Rule Number: 3005

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1. Purpose

This rule details the protocols for *Issuing* and using *Work on Track Authorities (WoTA)*. These *Authorities* are used to close a defined portion of *Track* for a specified period.

2. General

Only Network Controllers may authorise a WoTA for Track under their control.

A WoTA is Issued to the Protection Officer and gives Exclusive Occupancy unless Issued in accordance with Section 3.1 of this rule.

The *Protection Officer* applying this rule must have a minimum of *Protection Officer* Level *Competency* in accordance with Rule <u>1004 Track Access Accreditation</u>.

A single work group, including that group's equipment, and Associated Rail Traffic, may occupy the portion of Track defined by the WoTA.

The *Track* may be broken or *Obstructed*.

Associated Rail Traffic is permitted in a WoTA.

3. Authorisation

Before authorising the *WoTA*, the *Network Controller* must make sure that:

- another Work on Track Authority or Local Possession Authority is not in use within the proposed limits;
- approaching Rail Traffic can be Restrained at the ends of the Section that includes the proposed limits;
- Stabled Rail Traffic not associated with the WoTA, but is within the limits of the WoTA, must not be authorised to move;
- Stabled Rail Traffic that is attended by Rail Traffic Crew must be issued with a Restraint Authority.
- Rail Traffic associated with the WoTA within the limits has been identified and is being managed as agreed by the Protection Officer and the Network Controller,
- the Protection Officer knows about any existing Obstructions; and
- Blocking Facilities have been applied in accordance with Rule 6003 Blocking Facilities to prevent Unauthorised Rail Traffic entry into the proposed limits.

The Network Controller must confirm with the Protection Officer the:

- name, Track Access permit number and contact details of the Protection Officer,
- type of work;
- intended start and finish times: and
- for manual transmissions only, the *Location* using two or more of the following identifiers:
 - a kilometre sign and Section;
 - Station name:
 - a Points number:
 - a signal number;
 - an observance of *Points* or signal *Aspect* change;
 - permanent structures, such as a bridge, roadway or overpass used only in conjunction with one of the above identifiers; or
 - another identifier.

3.1 Authorising a WoTA where rail traffic is holding a Uni - Directional Authority

A WoTA may be authorised when Rail Traffic holding a Uni-Directional Authority has Cleared the limits of the proposed worksite by confirming:

- with the *Protection Officer*, the *Rail Traffic* identification number of the lead vehicle of a *Train* or the last vehicle of a *Track Vehicle* movement:
- with the Rail Traffic Crew, the Location of their Rail Traffic; or
- that the Section is Clear.

4. Protection Officer

4.1 Protection Officer

There must be a *Protection Officer* present at the worksite while workers are present, until the *WoTA* is *Fulfilled*. The *Arc Infrastructure* Operations delegate must authorise a *WoTA* to remain in place without being *Fulfilled*.



WARNING: Safety measures must be in place to Protect workers from Associated Rail Traffic and other heavy Plant and equipment been used within the worksite, e.g. the use of Lookouts, Stop signs etc.

A Protection Officer must:

- make sure that work in the *Danger Zone* does not begin before the required safety measures are in place;
- be responsible for the *Protection* of workers from *Rail Traffic*;
- make sure the *Tracks* between the worksite and protecting *Locations* remain *Clear* of *Obstructions*;
- make sure that the worksite is Protected against the Unauthorised entry or exit of Rail Traffic;
- tell workers about the Locations of Safe Places:
- tell workers about the protection and limits in place:
 - before work begins; and
 - if the protection arrangements change.

4.2 Change of Protection Officer

An outgoing *Protection Officer* must tell an incoming *Protection Officer* about the worksite *Protection* arrangements.

The incoming Protection Officer must:

- tell affected Network Controllers about the changed contact arrangements;
- confirm with the Network Controller the WoTA number; and
- make a Permanent Record of the handover of the WoTA.

5. Obtaining a WoTA

The Network Controller and the Protection Officer must confirm:

- the Issuing Network control desk;
- the WoTA limits;
- the Points to be clipped, in accordance with Procedure 9000 <u>Clipping and Securing</u> Points, if required;
- the duration of the *WoTA*; and when the *WoTA* is issued, the *Protection Officer* must ensure the required *Protection* is in place before work commences; the unique identifying number;
- that *Blocking Facilities* have been applied, to prevent entry of *Rail Traffic* into the portion of *Track* within the proposed limits;
- the Protection Officer's name and contact details;
- the time of *Issue*; and
- the date of Issue.

The Protection Officer must repeat the details of the WoTA back to the Network Controller.

The Network Controller must make sure that other affected Network Controllers are aware of the Protection.

5.1 Where the WoTA is issued electronically

The Network Controller and the Possession Protection Officer must confirm:

- Authority ID;
- Sections Blocked; and
- status.

5.2 Where the WoTA is issued manually

The Network Controller and the Protection Officer must confirm:

- the Protection Officer's name and contact details;
- a unique identifying number;
- that Blocking Facilities have been applied to prevent entry of Rail Traffic into the portion of Track within the proposed limits;
- the time of Issue; and
- the date of Issue.

The Protection Officer must repeat the details back to the Network Controller.

5.3 Where other Network Controllers are affected by the WoTA

The Network Controller must make sure that other affected Network Controllers are aware of the WoTA.

6. Protection



WARNING: Work must not start in the *Danger Zone* until the required *Protection* is in place.

The Network Controller must apply Blocking Facilities, where available, to prevent Unauthorised Rail Traffic from entering the WoTA.

Where *Blocking Facilities* are unavailable, the *WoTA* must be *Protected* using *In-Field Protection*.

In addition to *Blocking Facilities* the *WoTA* must be *Protected* using *In-Field Protection* if:

- the *Track* will be broken;
- the *Track* geometry will be altered;
- heavy Plant will be used; or
- there is Associated Rail Traffic.

Where *Joint Occupancy* is permitted and any worksite, within the same *Blocking Limits*, has *Associated Rail Traffic*, all worksites must use *In-Field Protection*. Where one worksite has associated rail traffic only one other *WoTA* is permitted.

6.1 In-Field Protection

In-Field Protection can be one of the following:

- Railway Track Signals (RTS) and Rail Clamp Stop Sign;
- RTS and a STOP sign;
- Track Closed Warning Device; or
- Points Secured to prevent Rail Traffic entry.



NOTE: *RTS* must be used in accordance with Procedure <u>9004 Using</u> Railway Track Signals.

6.2 Terminal Lines

In-Field Protection is not required between the worksites and the end of a *Terminal Line* if the *Network Controller* tells the *Protection Officer* that there are no planned *Rail Traffic* movements from that direction.

Where there is *Stabled Rail Traffic* not associated with the *WoTA*, within the limits of the *WoTA*, the *Protection Officer* must place *In-Field Protection* to prevent entry in to the *WoTA*.

6.3 Centralised Traffic Control (CTC) Territory

Protecting Signals must be placed to STOP with Blocking Facilities applied and In-Field Protection, as required by this rule, placed:

- at that Protecting Signal; or
- at least 500 metres from the worksite in such a position that any *Rail Traffic* entering the *WoTA* limits must pass over that *In-Field Protection*.

If a Controlled Absolute Signal less than 500 metres from the worksite is used to prevent access to the portion of *Track* within the *WoTA* limits, and a set of *Points* is available for a different *Route*, then set and *Secure* the *Points* for the different *Route*.

Where *In-Field Protection* is not required by this rule and the proposed worksite is within 500 metres of the *Protecting Signal* then:

- two consecutive Controlled Absolute Signals must be set at STOP with Blocking Facilities applied; or
- one Controlled Absolute Signal must be set at STOP with Blocking Facilities applied, with:
 - Points Secured to prevent Access; or
 - an easily reached Safe Place available and a Lookout provided.

If *Rail Traffic* can approach from more than one direction, the *Protection Officer* must protect all points of entry into the *Blocking Limits*.

<u>Figure 3005-1</u> Example of a *Protecting Signal* less than 500 metres from the worksite and *Points Secured* for a different *Route*.

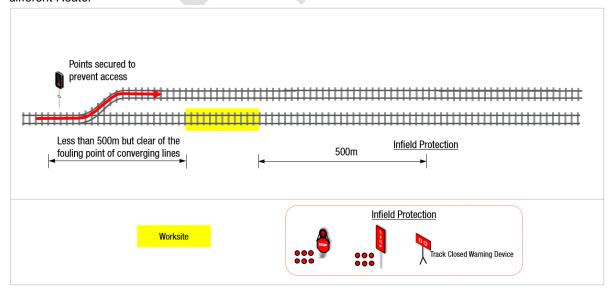
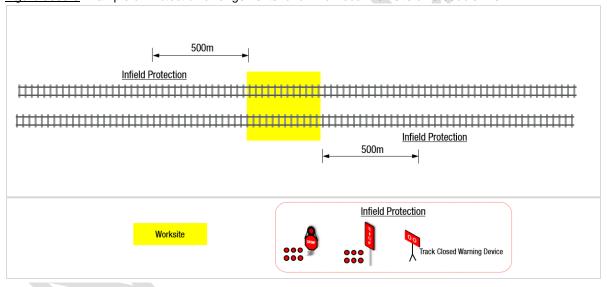


Figure 3005-3 Example of Protection arrangements for an individual worksite on a double line.



6.4 Train Order Territory

Blocking Facilities must be applied to the Network Control System on the Section beyond Station Limits sign for the entry to the WoTA limits and In-Field Protection, as required by this rule, placed:

- at that Station Limits sign; or
- at least 500 metres from the worksite in such a position that any *Rail Traffic* entering the *WoTA* limits must pass over that *In-Field Protection*.

Infield Protection Infield Protection Worksite

Figure 3005-4 Example of *Protection arrangements* for an individual worksite on a single line.

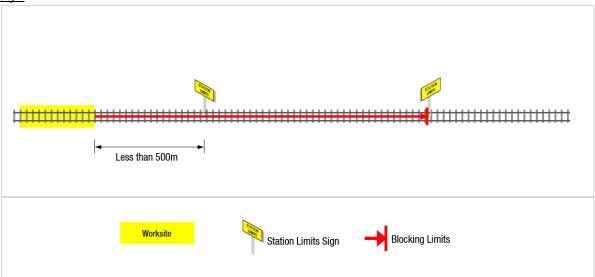
If a Station Limits sign less than 500 metres from the worksite is used to prevent Access to the portion of Track within the WoTA limits, and a set of Points is available for a different Route, then set and Secure the Points for the different Route. If Points cannot be Secured for a different Route, then Blocking Facilities must be applied up to the previous Station Limits sign.

Where In-field Protection is not required by this rule and the proposed worksite is within 500 metres of the Station Limits sign then:

- Blocking Facilities must be to two consecutive Station Limits sign; or
- Blocking Facilities applied to the first Station Limits sign, with:
 - Points Secured to prevent Access; or
 - an easily reached Safe Place available and a Lookout provided.

If Rail Traffic can approach from more than one direction, the Protection Officer must protect all points of entry into the Blocking Limits.

Figure 3005-5 Example of *Protection* arrangements for an individual worksite within 500m of the *Station Limits* sign.



6.5 Request for Blocking Facilities from a Person other than a Protection Officer

The Network Controller may apply Blocking Facilities in accordance with Rule <u>6003</u> <u>Blocking Facilities</u> without Secure Blocking Codes when a Protection Officer is not the requesting person to allow, for example:

- Emergency services Access to the Network;
- passenger Train evacuation; or
- livestock or vehicles to directly cross the Track.

The Network Controller must:

- confirm the *Location* and the work to be done;
- make sure the line is *Clear* between the *Protecting Signals* and the proposed worksite and any *Rail Traffic* that has passed the worksite will not return;
- set the Protecting Signals at STOP and apply Blocking Facilities;
- advise the person of the arrangements and authorise the work; and
- when told that the area is Clear, remove the Blocking Facilities.

6.6 Adjacent Line

If the Safety Assessment indicates that workers need to be Protected from Rail Traffic on Adjacent lines, the Protection Officer must arrange for Adjacent lines to be Protected in accordance with Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines.

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

6.7 Joint Occupancy

The *Network Controller* may authorise a *WoTA* for a portion of *Track* where a *WoTA* is current, provided the *Protection* limits for the worksites will not overlap.

The Network Controller may Issue the additional WoTA only if the Protection Officers have consulted and the Protection Officer who holds the current WoTA agrees and confirms with the Network Controller that a WoTA may be Issued.

Where one worksite has associated rail traffic only one other *WoTA* is permitted.

7. Rail Traffic

Only *Rail Traffic* associated with the *WoTA* may enter the limits of the *WoTA* unless the *WoTA* has been *Fulfilled* or where manually issued, suspended in accordance with section 9 of this rule.

Other Rail Traffic may cross the WoTA to enter or exit a Running Line, Siding or At Grade Rail Crossing, but only with the Protection Officer's agreement.

Before entering the WoTA, Rail Traffic Crews must verify with the Protection Officer that the WoTA is In-Effect.

7.1 Rail Traffic Entering or Travelling Within the WoTA Limits

The Protection Officer requiring the Associated Rail Traffic must manage that Rail Traffics movement within the WoTA, and where there is an adjoining WoTA through the WoTA. The Protection Officer or a Delegated Protection Officer must act as the Pilot.

Where another *WoTA* is permitted under *Joint Occupancy* the *Pilot* must, before entry to the affected section and before *Rail Traffic* exits a worksite:

- confirm with the *PO*s of all the *WoTA*s that the *Rail Traffic* can proceed:
- the Location of Worksite Protection; and
- that the line is Fit for Purpose.

The *Protection Officer* must make sure that *Rail Traffic* associated with the *WoTA* does not exceed the limits of the *WoTA*.

If *Temporary Speed Restriction* signs have not been erected, *Rail Traffic*, entering and *Travelling* within the *WoTA* limits must:

- be Piloted; or
- receive written or verbal instructions from the Protection Officer.

7.2 Fixed Signals

Fixed Signals within the limits of the WoTA must, where possible, be placed to PROCEED for Rail Traffic movements.

Where *Fixed Signals* cannot be placed to PROCEED for *Rail Traffic* movement, they must be passed in accordance with Rule <u>6013 Passing Fixed Signals at Stop</u>.



NOTE: Inside a WoTA, the Protection Officer must approve all Rail Traffic movements passed Fixed Signals and would request the Network Controller to place Fixed Signals at PROCEED, the Network Controller can only place Fixed Signals at PROCEED on the request of the Protection Officer.

7.3 Rail Traffic Departing the WoTA

Rail Traffic may depart the limits of the WoTA only on the Authority of the Network Controller.

8. Communications with Network Control

The *Protection Officer* must be the only point of contact between *Network* Control and work groups for matters of worksite *Protection*.

The Protection Officer must tell affected Network Controllers about:

- the Protection arrangements;
- Protection arrangements on Adjacent lines; and
- work progress at agreed times.

The Protection Officer must, if necessary, seek an extension of time.

When the agreed time limit has been exceeded by 15 minutes and the *Protection Officer* has not requested an extension of time, the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

Suspending a manually issued WoTA for the movement of nonassociated Rail Traffic

A WoTA is suspended when the Protection Officer tells the Network Controller that:

- work sites are clear of workers, tools and equipment, including any Associated Rail Traffic:
- In-Field Protection has been removed;
- the portion of Track included in the WoTA has been confirmed as fit for the Rail Traffic passage; and
- Blocking Facilities can be removed.

The *Protection Officer* must tell the *Network Controller* and the *Rail Traffic Crew* about operating restrictions that have been placed or removed in accordance with section 11 of this rule.

Reinstating a manually issued WoTA

The WoTA can be reinstated after the rear of the Rail Traffic has cleared the Section or the worksite and the Rail Traffic is not returning.

The Protection Officer must:

- confirm with the Network Controller the WoTA number;
- ask the Network Controller to re-instate the WoTA and apply new Blocking Facilities;
 and
- ensure all Protection has been replaced before allowing workers to re-enter the Danger Zone.

11. Fulfilling the WoTA

Before Fulfilling the Authority the Protection Officer must make sure that:

- Associated Rail Traffic and all equipment has Cleared the Track;
- all work groups have Cleared the worksites;
- In-Field Protection has been removed;
- if necessary, signals have been restored to normal use; and
- the portion of Track included in the Authority is Certified as available for use.

The Protection Officer and the Network Controller must Fulfil the Authority.

Where the WoTA is manually issued, the Network Controller must confirm with the Protection Officer that Blocking Facilities can be removed.

The *Protection Officer* must tell the *Network Controller* about operating restrictions that have been placed or removed.

12. Keeping Records

Network Controllers and the Protection Officer must keep Permanent Records about the details, including Protection arrangements and changes to the worksite Protection arrangements.

13. References

1004 Track Access Accreditation

4017 Overdue Occupancies

6003 Blocking Facilities

6005 Fixed Signals

6013 Passing Fixed Signals at Stop

9000 Clipping and Securing Points

9004 Using Railway Track Signals

9010 Protecting Work from Rail Traffic on Adjacent Lines

14. Effective Date

3 February 2020



Network Safeworking Rules and Procedures

Lookout Working

Rule Number: 3013

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.

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1. Purpose

The object of this rule is to detail how *Lookout Working* is to be used to give warning of approaching *Rail Traffic* to workers in or near the *Danger Zone*.

2. General

If the WoTA method is practical, this is the preferred method and must be applied.

The *Network Controller* must be advised when *Lookout Working* is being used on *Track* under their control.

Lookout Officers are the only safety measure used in this method for work in the Danger Zone.

The *Lookout Working* method must not be used for moving worksites, work that breaks the *Track* or alters *Track* geometry.

Work in the *Danger Zone* using the *Lookout Working* method must be done in daylight hours only, where visibility allows.

The *Protection Officer* applying this rule must have a *Protection Officer (PO) Competency* in accordance with Rule 1004 Track Access Accreditation.



WARNING: Information on the running of Rail Traffic is a planning tool only and workers should expect Rail Traffic to approach from any direction at any time.

The *Protection Officer* must also obtain information concerning *Rail Traffic* movements for the work *Location*, from the *Network Controller*.

Lookout Working may be used, during daylight hours, for:

- work requiring the use of Light Tools or Devices which can be easily and immediately removed from the Track by one worker without mechanical assistance;
- inspections in the *Danger Zone*; or
- work conducted in the *Rail Corridor*, but outside of the *Danger Zone*, that may intrude into the *Danger Zone*.



NOTE: A *Lookout* Officer provided for work outside the *Danger Zone* that may intrude into the *Danger Zone* is in place to warn workers before they intrude into the *Danger Zone* even if there is not *Rail Traffic* approaching.

2.1 Tools

Workers using the *Lookout Working* method must ensure any *Light Tools or Devices* used do not interfere with the ability of the worker to respond to a *Lookout* Officer's warning.

3. Authorisation

Before authorising Lookout Working, the Network Controller must make sure that:

- another Work on Track method is not in use at that Location; and
- the Protection Officer knows about any existing Obstructions.

The *Protection Officer* must advise the *Network Controller* of their name, *Track Access* Permit number and contact details.

The Protection Officer must confirm with the Network Controller the:

- name, Track Access Permit number and contact details of the Protection Officer,
- type of work;
- · intended start and finish times; and
- Location using two or more of the following identifiers:
 - a kilometre sign and Section;
 - Station name;
 - a Points number;
 - a signal number;
 - an observance of *Points* or signal *Aspect* change;
 - permanent structures, such as a bridge, roadway or overpass used only in conjunction with one of the above identifiers; or
 - another identifier.

Where an existing *Track Occupancy* is in place, the *Network Controller* may advise that *Lookout Working* is permitted only if the *Protection Officers* have consulted and agree that *Lookout Working* can be done within the existing *Authority*.



NOTE: If the existing *Track Occupancy* is a *Local Possession Authority* (LPA) the **Possession Protection Officer** must approve the work.

4. Protection Officer

There must be a *Protection Officer* present at the worksite for the period of the work.

A Protection Officer must:

- complete a worksite *Protection* plan and conduct a pre-work *Safety Assessment*,
- make sure that work in the *Danger Zone* does not begin before the required safety measures are in place;
- be responsible for the *Protection* of workers from *Rail Traffic*;
- tell workers about the *Locations* of *Safe Places*:
- determine the number of *Lookout* Officers needed to *Protect* the work;
- make sure Lookout Officers do not perform their function continuously at the same Location for more than 60 minutes;
- rotate the Lookout Officers, and provide a break from Lookout duties equivalent to the period the Lookout duty was last performed, before resuming as a Lookout Officer; and
- ensure that Lookout Officers do not perform Lookout Officer duties for more than 4 hours combined in a 24-hour period.



NOTE: A *Protection Officer* must be satisfied that other work will not interfere with *Protection* duties.

5. Protection



WARNING: Work must not start in the *Danger Zone* until the required safety measures are in place.

When *Lookout Working* is permitted, the *Protection Officer* must put the required safety measures in place and commence work.

5.1 Safe Places

An easily-reached Safe Place must be available if the Lookout Working method is used.

Workers must immediately be able to remove themselves, tools and materials to a *Safe Place* when told to do so by a *Lookout* Officer.

5.2 Noisy Machinery



WARNING: A *Protection Officer* must take into account the extra time for the minimum *Sighting Distance* required when providing touch warnings.

Where the work involves noisy equipment and the workers are wearing hearing protection, the *Protection Officer* must ensure other workers are positioned to provide a physical warning, by touch, to those workers.



NOTE: The worker providing touch warning must do no work other than providing warning.

The Lookout Officer must be visible to workers at all times.

5.3 Placing Lookout Officers

The Protection Officer must make sure:

- that the *Locations* of *Lookout* Officers and the visibility conditions give *Lookout* Officers enough *Sighting Distance* of approaching *Rail Traffic*;
- that Lookout Officers have Effective Communication with workers and an Audible Warning Device;
- that the Lookout Officer has a backup Audible Warning Device; and
- that when Rail Traffic approaches, Lookout Officers can warn workers in time to allow them to:
 - react to the warning of the approach of Rail Traffic; and
 - move themselves and their equipment to a Safe Place before the Rail Traffic arrives.

Only one *Lookout* Officer in each direction is permitted, distant *Lookout* Officers are not permitted.

Where the *Protection Officer* determines that it is safe to use a single *Lookout* Officer to provide warning for both directions the minimum reaction time must be increased from 5 seconds to 15 seconds when calculating the *Sighting Distance*.

5.4 Lookout Officers



WARNING: Lookout Officers must not use radios or telephones to warn workers.

Lookout Officers must be alert for *Rail Traffic* which is unexpected or comes from the *Wrong Running-Direction*.

Lookout Officers must wear a high visibility Yellow vest to ensure they are readily identifiable.

Lookout Officers must:

- agree with the *Protection Officer* about how workers will be warned about the approach of *Rail Traffic*;
- stand or walk in a Safe Place where they can see approaching Rail Traffic;
- keep a continuous watch for the approach of *Rail Traffic* from any direction;
- remain within sight and hearing or in physical touch of the workers. If the *Lookout* Officer cannot do this safely, they must tell the *Protection Officer*,
- tell the Protection Officer if the Lookout Officer needs to move from the designated position and only move if all workers and their equipment are in a Safe Place or a new Lookout Officer is in position; and
- tell the *Protection Officer* if conditions, such as visibility, change.

If visibility conditions deteriorate to where the *Lookout* Officer can no longer maintain *Sighting Distance*, the *Lookout* Officer must warn the workers to get them clear of the *Danger Zone* and then tell the *Protection Officer* of the changed conditions.



WARNING: *Lookout* Officers must do no work other than look for and give warning to workers about the approach of *Rail Traffic*.

Lookout Officers must not:

- manage the passage of Rail Traffic, or
- do any other work.

5.5 Giving Warning

When *Rail Traffic* approaches the worksite the *Lookout* Officer must immediately warn the workers.



NOTE: Warning must be given as soon as *Rail Traffic* is seen to be approaching even if the *Rail Traffic* has not reached the minimum *Sighting Distance*.

The workers must:

- acknowledge the Lookout Officer's warning by raising an arm above their head;
- remove their tools, equipment and materials from the *Track*; and
- move to a position of safety.

Only if all workers and their equipment are in a *Safe Place* can the *Lookout* Officer face the approaching *Rail Traffic* and give an ALL CLEAR *Handsignal*, in accordance with Rule <u>2003</u> <u>Handsignals and Verbal Commands</u>, to the *Rail Traffic Crew*.

The Lookout Officer must maintain the ALL CLEAR Handsignal until the Rail Traffic Crew acknowledges the Handsignal.

The Lookout Officer must make sure that the line is Clear before allowing work to resume.

5.6 Adjacent Line

If the Safety Assessment indicates that workers need to be protected from Rail Traffic on Adjacent lines, the Protection Officer must arrange for Adjacent lines to be Protected in accordance with Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines.

The *Protection Officer* may arrange for the speed of *Rail Traffic* on *Adjacent* lines to be restricted.

6. Calculating the Minimum Warning Time



WARNING: If the calculated minimum warning times cannot be met or there is any doubt that sufficient *Sighting Distance* is available, then another *Protection* method must be used.



WARNING: When using a single *Lookout* Officer to provide warning for both directions, a minimum of 15 seconds is used for the reaction time.

The minimum warning time required shall be calculated as follows:

- reaction time (minimum 5 seconds);
- time required to move the workers, tools, equipment and materials *Clear* of the *Track* (determined in the test conducted by the *Protection Officer*); plus
- being in a position of safety for a minimum of 10 seconds before *Rail Traffic* arrives.

6.1 Example of How Warning Time is Calculated

Figure 3013-1 Calculation Table (example)

Reaction time	5 Seconds
Time required to move the workers, tools, equipment and materials clear of the track	20 Seconds
Minimum time to be in a position of safety before rail traffic arrives	10 Seconds
Minimum warning time required.	Total 35 Seconds

The minimum *Sighting Distance* needed to see an approaching movement, so that sufficient warning can be given, is dependent on the minimum warning time required and the maximum *Track* speed, determined from Figure 3013-2 in section 6.2 and as demonstrated in the following example:

Example: The minimum warning time required in this example is 35 seconds and the maximum *Track* speed in the area is 120 km/h; therefore the required minimum *Sighting Distance* of approaching *Rail Traffic* from the table in Figure 3013-2 is 1170 metres. The *Lookout* Officer must be positioned to be able to see the approaching *Rail Traffic* at least 1170 metres in order to give the minimum warning time required.

The Protection Officer must:

- know the maximum speed for *Rail Traffic* on the portion of line that the work is to take place; and
- conduct a test to determine how long it will take for the workers to remove their equipment and move to the Safe Place.

6.2 Minimum Sighting Distance

Figure 3013-2 Sighting Distance table.

	Minimum Warning Time					
Maximum Track Speed	20 sec	25 sec	30 sec	35 sec	40 sec	45 sec
160km/h	890m	1115m	1335m	1560m	1780m	2000m
150km/h	835m	1045m	1250m	1460m	1665m	1875m
140km/h	780m	975m	1170m	1365m	1560m	1750m
130km/h	725m	905m	1085m	1265m	1445m	1625m
120km/h	670m	835m	1000m	1170m	1335m	1500m
110km/h	615m	765m	920m	1070m	1225m	1375m
100km/h	560m	695m	835m	975m	1115m	1250m
90km/h	500m	625m	750m	875m	1000m	1125m
80km/h	445m	560m	670m	780m	890m	1000m
70km/h	390m	490m	585m	680m	780m	875m
60km/h	335m	420m	500m	585m	670m	750m
50km/h	280m	350m	420m	490m	555m	625m
40km/h	225m	280m	335m	390m	445m	500m
30km/h	170m	210m	250m	295m	335m	375m
25km/h	140m	175m	210m	245m	280m	315m
20km/h	115m	140m	170m	195m	225m	250m
15km/h	85m	105m	125m	150m	170m	190m



NOTE: Distances in Figure 3013-2 have been rounded up to the nearest 5m.

7. Communications with Network Control

The *Protection Officer* must be the only point of contact between the *Network Controller* and the work group for matters of worksite *Protection*.

The Protection Officer must, if necessary, seek an extension of time.

When the agreed time limit has been exceeded by 15 minutes and the *Protection Officer* has not requested an extension of time the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

7.1 Change of Protection Officer

An outgoing *Protection Officer* must tell an incoming *Protection Officer* about the worksite *Protection* arrangements.

The incoming *Protection Officer* must:

- tell affected Network Controllers about the changed contact arrangements; and
- make a Permanent Record of the handover of Lookout Working.

8. Ending Lookout Working

The Protection Officer must make sure, and tell the Network Controller that:

- all workers, tools, equipment and materials are Clear of the worksite; and
- · Lookout Working has ended.

9. Keeping Records

The Network Controller and the Protection Officer must keep Permanent Records about the details and changes to the worksite Protection arrangements.

10. References

1004 Track Access Accreditation

2003 Handsignals and Verbal Commands

4017 Overdue Occupancies

9010 Protecting Work from Rail Traffic on Adjacent Lines

11. Effective Date

3 February 2020



Network Safeworking Rules and Procedures

Infrastructure Booking Advice

Rule Number: 3015

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1. Purpose

This rule describes the protocols for recording and notifying of approved changes to the *Network* regarding *Infrastructure* when it has been booked out of or back into use and when new *Infrastructure* is *Commissioned*.

2. General

The *Infrastructure* Booking Advice (IBA) form is used to notify of the temporary or permanent installation or removal of *Infrastructure*.

3. Advertising Infrastructure Work

Infrastructure Representatives must make sure that work on Infrastructure that affects the configuration of the Network is documented and Advertised.

New Infrastructure must be Advertised before it is Certified and Commissioned.

4. Compiling Infrastructure Booking Advice Form

The *Infrastructure Representative* must use an IBA form to detail work that requires *Infrastructure* equipment to be:

- · temporarily booked out of use;
- permanently removed;
- booked back into use; or
- newly Commissioned.

Infrastructure Representatives must compile the IBA form before equipment is removed or *Commissioned*.

The Infrastructure Representatives must:

- send a copy of the IBA form to the appropriate Network Controller, or
- jointly fill out the IBA form with the Network Controller.

The *Infrastructure Representative* must give a copy of the IBA form for:

- work associated with a Local Possession Authority (LPA), to the Possession Protection Officer, or
- work associated with a Work on Track Authority (WoTA) to the Protection Officer.

The Network Controller and the Infrastructure Representatives must keep completed IBA forms.

5. Securing Infrastructure

Infrastructure that is not yet *Commissioned*, or has been decommissioned but not yet removed, must be *Secured* against *Unauthorised* use.

6. Certifying Infrastructure

Infrastructure that has been installed or removed must be Certified in an IBA form:

- filled out by the relevant Infrastructure Representatives; and
- acknowledged by the Network Controller.

7. Booking Infrastructure Back into Use

If *Infrastructure* has been *Certified* as working correctly, the relevant *Section* of the IBA form must be signed.

The *Infrastructure Representative* must endorse the copy of the IBA form held by the *Possession Protection Officer* or the *Protection Officer*.

If parts of the *Infrastructure* remain un-certifiable at the end of work, they must be booked out of use again using a new IBA form.

The new IBA form must:

- · be compiled before the original advice is signed; and
- include a reference to the IBA form it replaces.

The completed IBA form must include a reference to the new IBA form for those parts of the *Infrastructure* that were not *Certified*.

8. Using Uncommissioned Infrastructure

Infrastructure that is not yet *Commissioned* (uncommissioned) may be given limited *Certification* for specific purposes including *Rail Traffic* movements.

Before uncommissioned *Infrastructure* is used:

- an Infrastructure Representative must certify that it is fit for the specific purpose; and
- it must be Advertised.

Uncommissioned Infrastructure must be:

- · unsecured before use; and
- Secured after use.

9. References

Nil

10. Effective Date

3 February 2020



Network Safeworking Rules and Procedures

Track Vehicles

Rule Number: 3019

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.

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1. Purpose

The function of this rule is to outline the protocols for managing the safety of *Track Vehicles* when *Travelling* and carrying out work in the *Network*.

General

Track Vehicles include:

- Road Rail Vehicles, including *Track* inspection vehicles;
- Track maintenance machines.

Prior notice must be given when *Track* maintenance machines are to run or work on a *Running Line*.

The Competent Worker operating a Track Vehicle in accordance with this rule must have a minimum of Track Vehicle Operator (TVO) Competency in accordance with Rule 1004 Track Access Accreditation.

Where the Competent Worker is not an accredited Protection Officer Track Vehicles (POTV) the vehicle must be accompanied by a suitably accredited POTV.

Competent Workers in charge of *Track Vehicles* must act in accordance with Rule <u>2027</u> Responsibilities of Rail Traffic Crews.

Track Vehicle 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 Infrastructure delegate.



WARNING: If a *Track Vehicle* that does not reliably operate *Track-Circuits* is to *Travel* over *Points* that automatically return to a normal setting, and the *Points* are in a position where they can automatically return to normal, the *Points* must be *Secured* for the passage of the *Track Vehicle*.

The *Infrastructure* delegate will provide a list of *Track Vehicles* that reliably operate the *Track Circuit* and *Level Crossing Protection*.

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:

- communications 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 is working.

The Competent Workers in charge of Track Vehicles must make sure the vehicle carries:

- at least 36 RTS; and
- Safeworking forms as necessary.



NOTE: Track Vehicles that are on and off tracked within a worksite are not required to carry RTS or Safeworking forms.

5. Occupying a Running Line

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

- Network Controller responsible for the Location;
- Possession Protection Officer in charge of a Local Possession Authority (LPA); or
- Protection Officer in charge of a Work on Track Authority (WoTA).

Where a *Track Vehicle* is to enter or *Travel* in *Dual Gauge Track* areas, the *Competent Worker* in charge of the *Track Vehicle* must confirm with the *Network Controller* the gauge of the *Track Vehicle*.

The Network 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 Station Limits;
- within Intermediate Sidings;
- within the limits of an Occupancy Authority;
- at approved on and off-*Track Locations*, where the approach of *Rail Traffic* can be managed by *Controlled Absolute Signals*; or
- within a Train Order Section where there is no approaching Rail Traffic.

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

- a kilometre sign and Section;
- a Points number;
- a signal number;
- observance of *Points* or signal *Aspect* change; or
- another identifier.

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

6. Track Vehicle Travel

Track Vehicles singly, coupled, or in *Convoy* must be worked under Absolute *Block* System conditions, in accordance with Rule <u>1002 Network Safeworking Principles</u>.

Track Vehicles must travel on a Movement Authority issued by the Network Controller.

The Network Controller must tell affected Network Controllers of the Track Vehicle Travel.

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

Before authorising a Movement Authority, the Network Controller must make sure that:

- there is no conflicting movement;
- the Competent Worker knows about existing Obstructions;
- the Competent Worker understands and agrees to the limits of the Movement Authority.

In double line areas Track Vehicles must Travel on the correct Running Line.

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

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 Network Controller must be told 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 Network Controller,
- report to the Network 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 Network Controller when the Limits of 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
- As Associated Rail Traffic get the Protection Officer's Authority before entering a Work on Track Authority Location or traversing a worksite within a Work on Track Authority; or

• As Associated Rail Traffic get the Possession Protection Officer's Authority before entering a Local Possession Authority (LPA) Location or traversing a worksite within a Local Possession Authority (LPA).

6.1 Authority for Track Vehicles to Travel

Track Vehicles must be Authorised to Travel on a Movement Authority (MA) created in the Network Control System and issued by the Network Controller responsible for that portion of line.

Road Rail Vehicles (RRV) are permitted on-track within the Section once opposing Rail Traffic has passed the RRV Location provided:

- the RRV is to Travel in the opposite direction, from the passing Rail Traffic;
- the opposing Rail Traffic has been correctly identified (service number/loco number);
 and
- the opposing Rail Traffic has been observed and confirmed Complete past the RRV Location.

6.1.1 Obtaining a manual Movement Authority (MA)

The Competent Worker in charge of a Track Vehicle must obtain a manual MA from the Network Controller responsible for the area over which the vehicle is to Travel.

Before *Authorising* the manual MA, the *Network Controller* must make sure that:

- within the *Train Order Territory*, no *Authority* has been issued for an opposing *Rail Traffic* movement;
- any Rail Traffic holding a Uni-Directional Authority has cleared the starting point of the proposed Track Vehicle movement and will not be returning;
- the Competent Worker knows about existing Obstructions; and
- the Competent Worker understands and agrees to the limits of the MA.

The *Network Controller* and the *Competent Worker* in charge of a *Track Vehicle* must confirm and record on the MA:

- the proposed MA limits;
- a unique identifying number;
- the gauge of the Track Vehicle;
- that Blocking Facilities have been applied, in accordance with Rule 6003 Blocking <u>Facilities</u>, to prevent entry of Rail Traffic into the portion of Track occupied by the <u>Track Vehicle</u>; and
- that the Secure Blocking Code provided on the form is recorded in the Network Control System.
 - The Network Controller must ensure this Secure Blocking Code is not recorded anywhere except in the Network Control System as required:

- the name of the Competent Worker in charge of a Track Vehicle and contact details;
- the Issuing Control desk;
- the time of Issue; and
- the date of Issue.

Before moving into the Section, the Competent Worker must:

- confirm Blocking Facilities have been applied by repeating back to the Network Controller the details of the Blocking;
- record the Blocking on the Movement Authority;
- ensure that all Points are correctly set; and
- obtain the Network Controller's verbal Authority to proceed.

6.2 Road Rail Vehicle Stopping for Work

The *Protection* provided by the Movement *Authority* permits work that:

- · does not require tools; or
- uses Light Tools or Devices which can be easily and immediately removed from the Track by one worker without mechanical assistance.

The work must not break the *Track* or alter *Track* geometry or structure.

If the *Road Rail Vehicle* is required to stop for work and there are *Adjacent* lines and the work may encroach into the *Danger Zone* of the *Adjacent* line, then the *Competent Worker* must act in accordance with Procedure 9010 Protecting Work from Rail Traffic on Adjacent Lines.

6.3 Track Vehicle setting back

6.3.1 Road Rail Vehicle setting back

If a Road Rail Vehicle is required to Set Back, the Competent Worker in charge must:

- ensure it is safe to Set Back;
- Travel at Restricted Speed; and
- not exceed the limits of the MA.

6.3.2 Track Machines setting back

Track Machines must not *Set Back* without the *Authority* of the *Network Controller* in accordance with Rule <u>4015 Setting Back or Propelling on Running Lines</u>, section 5.

6.3.3 Fulfilling a Movement Authority (MA)

The MA must be Fulfilled by the Competent Worker when the Road Rail Vehicle has:

- arrived at the end of the MA; or
- has been removed from and is Clear of the Running Line.

The Network Controller and the Competent Worker must endorse their copy of the MA as Fulfilled.

7. Travelling in Convoy

No more than three *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
- · comply with the instructions for closing up.

The Convoy must close up:

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

Operators of Track Vehicles in Convoy must maintain Effective Communication.

If communication is lost, Track Vehicle Operators 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 not sure of the whereabouts of the *Track Vehicle* 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, immediately after the vehicle has stopped, the *Track Vehicle* Operator must warn following *Track Vehicle* Operators using one or more of the following:

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

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

8. Travelling Over Level Crossings

8.1 When approaching an Active Control Level Crossing

If *Track Vehicles* cannot reliably operate the *Track Circuit* and *Level Crossing Protection* as approved by Manager Engineering and shown on the *Track Vehicles* Certificate of Compliance, the *Track Vehicle* Operators must stop short of the *Level Crossing*.

Before travelling over an *Active Control Level Crossing* with a vehicle that cannot reliably operate the *Track Circuit* and *Level Crossing Protection*, the *Track Vehicle* Operator must make sure that:

- the Level Crossing is clear of all road and pedestrian traffic; and
- if possible, manually operate the Active Controlled Level Crossing Protection.

If it is not possible to operate the manual switch (or one is not provided), wait for all road and pedestrian traffic to stop and the *Level Crossing* is clear, then proceed over *the Level Crossing* at *Restricted Speed*.

If *Track Vehicles* can reliably operate the *Track Circuit* and *Level Crossing Protection* as approved by Manager Engineering and shown on the *Track Vehicles* Certificate of Compliance, the *Track Vehicle* Operator must ensure:

- it is safe to proceed, and the Level Crossing is clear, or
- all road and pedestrian traffic has stopped before proceeding over the Level Crossing.

8.2 When approaching a passive Level Crossing

The *Track Vehicle* Operator must ensure:

- it is safe to proceed, and the Level Crossing is clear, or
- all road and pedestrian traffic has stopped before proceeding over the *Level Crossing*.

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 <u>4001 Protecting Disabled Rail Traffic.</u>

A Track Vehicle's Movement Authority must be Cancelled and a Work on Track Authority (WoTA) must be applied to Protect the Disabled Track Vehicle.

The *Disabled Track Vehicle* will be recovered as arranged by the approved *Arc Infrastructure* Representative.

10. Overdue Track Vehicle

If a *Track Vehicle* movement is overdue the *Competent Worker* and the *Network Controller* must act in accordance with Rule 4017 Overdue Occupancies.

11. Travelling Through WoTA or LPA Limits

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

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

- be Piloted; or
- receive written or verbal instructions from the Possession Protection Officer or Protection Officer.

Track Vehicles must only depart from the limits of the Work on Track Authority or Local Possession Authority with the Network Controller's Authority.

12. Track Vehicle Speed Limits



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

A Track Vehicle's speed must not exceed:

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

Track Vehicles other than Road Rail Vehicle's must not exceed 20 km/h over a Level Crossing.

12.1 Road Rail Vehicles

A Road Rail Vehicle must not exceed 10 km/h over Points.

13. Headlights

Headlights must be switched on to High Beam during Travel.

Headlights must be dimmed during approach to:

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

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

Track Vehicles may be Stabled on Running Lines only with the Operations Delegate.

Track Vehicles Stabled on lines other than Running Lines 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 Machine Stopping for Work

Track Machines stopping for work must be protected using a Work on Track Authority or Local Possession Authority.

18. Keeping Records

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

19. References

2027 Responsibilities of Rail Traffic Crew

4001 Protecting Disabled Rail Traffic

4007 Rail Traffic Whistles

4017 Overdue Occupancies

6003 Blocking Facilities

6013 Passing Fixed Signals at Stop

9006 Piloting Rail Traffic

9010 Protecting Work from Rail Traffic on Adjacent Lines

20. Effective Date

3 February 2020



Network Safeworking Rules and Procedures

Temporary Speed Restrictions

Rule Number: 3025

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1. Purpose

The purpose of this rule is to set out the protocols for applying a *Temporary Speed Restriction (TSR)*. The object of a *TSR* is to reduce the speed of *Rail Traffic* to ensure safe passage over a *Section* of *Track* when the *Track* is not safe for *Normal Speeds*.

2. General

TSRs are applied by an Infrastructure Representative.

A TSR overrides any existing higher speed.

A *TSR* may be applied due to:

- Infrastructure conditions;
- risks to workers; or
- weather conditions.

2.1 Advice of a TSR

Where possible Rail Traffic Crews are advised about a TSR by TSR signs, and by:

- the Driver Information System; or
- the Issue of a Condition Affecting the Network (CAN) warning, in accordance with Rule 2009 Reporting and Responding to a Condition Affecting the Network (CAN).

If it is not possible to place *TSR* signs immediately, *Rail Traffic Crews* must be given written or verbal advice of the *TSR*, before they enter the affected portion of *Track*. *TSR* signs must be placed as soon as is practical after the speed restriction is imposed.

Rail Traffic Crews must keep the advice for the duration of the journey.

3. Types of Signs

Temporary Speed Restriction ahead signs:

- indicate that a Temporary Speed Restriction is ahead; and
- display the maximum speed permissible for each *Rail Traffic* type over the affected portion of *Track*.

Temporary Speed Restriction start signs indicate:

- to Rail Traffic Crews, that they are entering the limits of a TSR; and
- the maximum speed permissible for each Rail Traffic type over the affected portion of Track.

Temporary Speed Restriction end signs indicate to Rail Traffic Crews that they are leaving the limits of a TSR.



NOTE: In *Bi-Directional* areas where the *TSR* applies in both directions, the back of the *TSR* start sign will indicate to *Rail Traffic* Crews that they are leaving the limits of a *TSR*.

3.1 Temporary Speed Restriction Ahead Sign

Temporary Speed Restriction ahead signs are diamond shaped with a yellow background and a horizontal black stripe. This sign is placed 2500 metres before a Temporary Speed Restriction start sign. Placed below the Temporary Speed Restriction ahead sign is a maximum speed sign displaying the maximum speed as detailed in the Drivers Information documentation, or where this is not available, to 15km/h over	Sign	Description	Required Action
the TSR.	20	ahead signs are diamond shaped with a yellow background and a horizontal black stripe. This sign is placed 2500 metres before a <i>Temporary Speed Restriction</i> start sign. Placed below the <i>Temporary Speed Restriction</i> ahead sign is a maximum speed sign displaying the maximum speed permitted for the	being prepared to <i>Travel</i> at the speed indicated on the maximum speed sign placed below the Speed Restriction ahead sign. Note: If no maximum speed sign is displayed below the <i>Temporary Speed Restriction</i> ahead sign, <i>Rail Traffic Crews</i> must be prepared to reduce speed as detailed in the <i>Drivers Information</i> documentation, or where this is not available, to 15km/h over

3.2 Temporary Speed Restriction Start Sign

Sign	Description	Required Action
	Temporary Speed Restriction start signs are circular shaped with a yellow background with a horizontal black stripe.	Rail Traffic must proceed at the speed shown on the maximum speed sign placed below the Temporary Speed Restriction sign.
20	This sign is placed 50 metres before the area covered by a Temporary Speed Restriction. Placed below the Temporary Speed Restriction start sign is a maximum speed sign displaying the maximum speed permitted for the restricted area.	Note: If no maximum speed is displayed below the Temporary Speed Restriction start sign, Rail Traffic Crews must be prepared to reduce speed as detailed in the Drivers Information documentation, or where this is not available, to 15km/h over the TSR.

3.3 Temporary Speed Restriction End Sign

Sign	Description	Required Action
	Temporary Speed Restriction end signs are white and circular. This sign is placed 50 metres beyond the Temporary Speed Restriction area.	Rail Traffic can return to the authorised Track Speed, once the Rail Traffic Consist has passed beyond the Temporary Speed Restriction end sign.
	Note: In <i>Bi-Directional</i> areas where the <i>TSR</i> applies in both directions, the back of the <i>TSR</i> start sign will indicate to <i>Rail Traffic Crews</i> that they are leaving the limits of a <i>TSR</i> .	

3.4 Placement

TSR signs must be placed:

- wherever possible, to the left of the line to which the TSR applies; and
- where they can be clearly seen by Rail Traffic Crews.

3.5 Adjoining TSRs

TSRs may Adjoin provided the TSR signs can be placed so that there is not two Temporary Speed Restriction ahead signs before a Temporary Speed Restriction sign.

Where the distance between *TSR*s will not permit the clear separation of signs, the lower speed must apply from the first *TSR* to the end of the lowest *TSR*, where:

- a Temporary Speed Restriction end sign must be placed; or
- a *Temporary Speed Restriction* sign placed, displaying a higher maximum speed sign.

Where a higher speed *TSR* applies at the end of a lower *TSR* then a *Temporary Speed Restriction* ahead sign is not required and a *Temporary Speed Restriction* sign with the higher maximum speed sign must be placed at the start of that *TSR*.

4. General Arrangement of TSR Signs



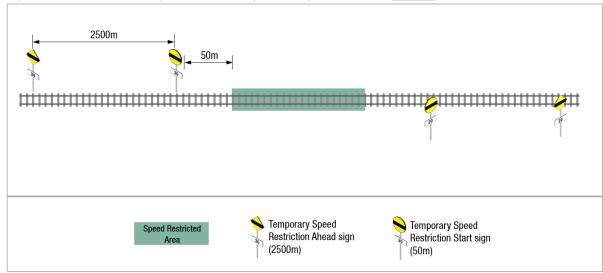
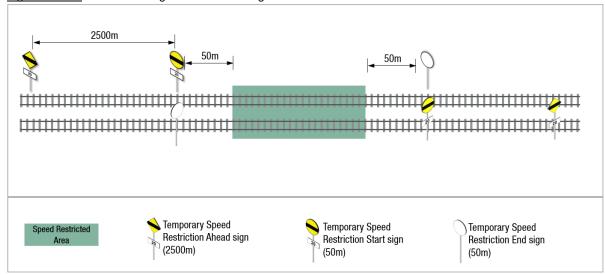
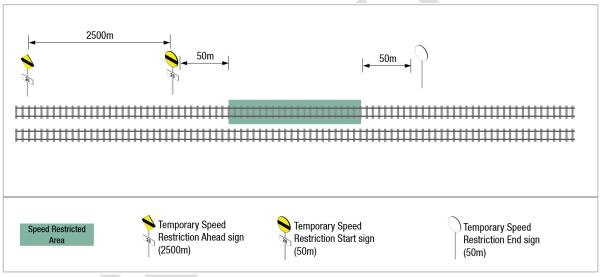


Figure 3025-2 General arrangements of TSR signs on double Uni-Directional Track.



<u>Figure 3025-3</u> General arrangements of *TSR* signs on double *Uni-Directional Track* where only one line is affected.

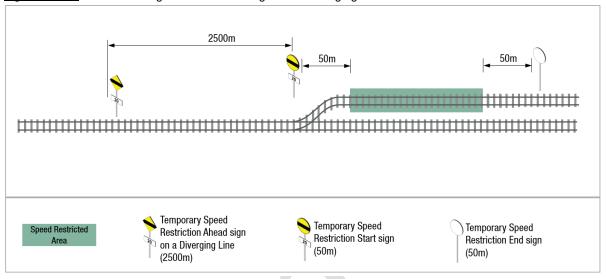


4.1 Diverging Routes

TSR signs must be placed on all lines that might give access to the affected line.

If the *TSR* applies on a diverging *Route*, the *Temporary Speed Restriction* ahead sign and *Temporary Speed Restriction* start sign will display an arrow in the direction of the divergence, or additional text to indicate the *Track* to which the speed restriction applies.

Figure 3025-4 General arrangements for TSR signs for a diverging line.



5. Keeping Records

Infrastructure Representatives, Rail Traffic Crews and Network Controllers must keep a Permanent Record of the details of TSRs.

6. References

2009 Reporting and Responding to a Condition Affecting the Network (CAN)

7. Effective Date

3 February 2020