

# Network Safeworking Rules and Procedures

## Lookout Working

Rule Number: 3013

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#### Document History

Version	Effective Date	Pages updated	Reasons for change
2.0	03 02 2020	All	Major Review

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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*.



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**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

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**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 2003 Handsignals and Verbal Commands, 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.

Maximum Track Speed	Minimum Warning Time					
	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