

Network Safeworking Rules and Procedures

Lookout Working

Rule Number: 3013

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Document History

Version	Effective Date	Pages updated	Reasons for change
2.01	31 10 2020	3	Warning added

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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



WARNING: This rule must not be applied between Toodyay West and Millendon Junction, in both the Up and Down directions, due to insufficient Sighting Distance. A Work On Track Authority is the only method to be used for work in the Danger Zone within this section

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 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