



Australian Government

Department of Education, Employment and Workplace Relations

TLIL3072A Operate signal panel or equipment

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit involves the skills and knowledge required to operate a signal panel and/or equipment in accordance with workplace procedures and the requirements of relevant safeworking regulations and codes of practice. It includes preparing for operation, controlling local rail traffic movement, implementing contingency plans for planned events and for system faults and failures, updating traffic movement documentation, and handing over or relieving the signaller in accordance with workplace requirements.

Licensing, legislative, regulatory or certification requirements are applicable to this unit. Persons achieving competence in this unit will need to fulfil the legislated rail safety requirements, including acts and regulations from the applicable state, together with any nationally approved compliance codes and/or guidelines.

Application of the Unit

The unit involves the application of operational principles, regulations, safeworking codes, protocols and procedures to the operation of a signal panel and/or equipment as part of workplace activities across a variety of operational contexts within the Australian rail industry.

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
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1 Prepare to operate signal control location	1.1 Reporting for duty is undertaken in accordance with OH&S requirements and organisational policies and procedures 1.2 Appropriate network control officer is contacted where required in accordance with organisational policies and procedures 1.3 Documentation is checked for local activities and/or rail traffic movements that may affect rail traffic operations in accordance with organisational procedures and policies 1.4 If required, signalling equipment is switched in for use 1.5 Operation of equipment is tested in accordance with organisational policies and procedures
2 Control local rail traffic movements	2.1 Local rail traffic movements are coordinated with other relevant personnel in accordance with organisational policies and procedures 2.2 Signalling systems are operated and monitored to ensure safe movement of rail traffic 2.3 Activities that may affect operations are reported and recorded in accordance with organisational procedures and policies
3 Communicate with rail safety workers and other relevant personnel	3.1 Communication with relevant rail safety workers is undertaken to ensure that they are informed of local rail traffic movements, in accordance with organisational policies and procedures 3.2 Communication with other relevant personnel is undertaken to ensure that they are informed of local rail traffic movements, in accordance with organisational policies and procedures
4 Monitor and respond to system alarms	4.1 System alarms are monitored as required by organisational policies and procedures 4.2 Activated alarms are responded to appropriately and reported to appropriate personnel in accordance with organisational policies and procedures 4.3 Identified faults are reported to appropriate personnel in accordance with organisational policies and

procedures

5 Implement contingency plans when instructed

5.1 When instructed, contingency plan to suit the disruption, system failure or fault is actioned in accordance with organisational policies and procedures

5.2 Local rail traffic movements are adjusted in accordance with organisational and/or local operational requirements

5.3 Communications with train controller and other relevant personnel are established and maintained as required

6 Update local rail traffic movement documentation

6.1 Local rail traffic movement documentation is amended, compiled and recorded in accordance with organisational policies and procedures

6.2 Local rail traffic movement information and documentation are handed over when relieved and/or at the completion of shift in accordance with organisational policies and procedures

7 Hand over control to relieving signaller

7.1 Relieving signaller is informed of operational status and any ongoing issues in accordance with organisational policies and procedures

7.2 Documentation is checked to ensure it is up-to-date and is then endorsed in accordance with organisational policies and procedures

8 Take over control from signaller

8.1 Information on operational status and any ongoing issues is received from signaller in accordance with organisational policies and procedures

8.2 Documentation is checked to ensure it corresponds to operational status and is then endorsed in accordance with organisational policies and procedures

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Relevant sections of legislated rail safety requirements, including acts and regulations from the applicable state, together with any nationally approved compliance codes and/or guidelines
- Organisational procedures for the control and coordination of local rail traffic operations
- Signalling and control systems and operations
- Specific local conditions and restrictions
- Types of communication systems available
- Types of surveillance and alarm systems in use
- Problems that may occur when operating signal panel or equipment, and action that should be taken to resolve them
- Relevant documentation requirements

Required skills:

- Communicate effectively with others
- Read, interpret and follow instructions, procedures and information relating to the control of local rail traffic
- Accurately complete documentation and enter data relating to the control of local rail traffic
- Use appropriate numeric functions when controlling rail traffic movement
- Operate communication systems to required protocol
- Report and rectify within limits of own role problems, faults and malfunctions identified when controlling local rail traffic in accordance with organisational procedures
- Monitor work activities in terms of planned schedule
- Modify activities depending on differing operational contingencies, risk situations and environments

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and/or equipment, and/or
 - applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment, and/or
 - in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

Control of local rail traffic movements may require the use of:

- manual signalling systems
- working timetables
- network plans
- written and verbal authority systems
- token systems

Activities that may affect the movement of rail traffic may include:

- track maintenance
- signal maintenance
- defective electrical systems
- diversion or alternative routing of rail traffic
- track inspection

Anomalies with local conditions and timetable may include:

- conflicting schedules
- incorrect run/train number
- incorrect routing/timetable plan

Events triggering the need for implementing contingency plans may include:

- train breakdowns and/or delays
- signalling faults
- hazardous materials spills
- track damage
- adverse environmental events
- collisions
- injuries and fatalities
- floods
- fires
- electrical system faults
- derailments

Communication systems may include:

- radios
- telephones, including mobile phones
- fax machines
- electronic, including email and intranet

Rail safety workers may include:

- train crew
- track workers
- contractors
- train controllers
- other signallers
- safeworking inspectors
- rail safety regulation officers

Other relevant personnel may include:

- customer service attendants
- station supervisors
- other network owners

Traffic movement documentation may include:

- train timetables
- track possessions and work notices
- incident and unplanned event reports
- signal and overhead diagrams
- train notices, including special train notices
- weekly notices
- safeworking documentation

Applicable procedures and codes may include:

- relevant state codes of practice and safeworking system requirements
- relevant state and territory OH&S legislation

Documentation may include:

- log books
- train registers
- safeworking forms and notices
- timetables
- train graphs

Operational status may include:

- track possessions
- blocked sections
- signalling equipment maintenance
- emergency situations
- extreme weather conditions
- contingency plans

Unit Sector(s)

Not applicable.

Competency Field

L – Resource Management