



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **TLIC3018A Operate on-train remote control system**

**Release: 1**

## **TLIC3018A Operate on-train remote control system**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit Descriptor**

This unit involves the skills and knowledge required to operate an on-train remote control system in accordance with safeworking and regulatory requirements and workplace procedures. It includes positioning equipment and motive power units, operating the system and shutting it down after operation. Licensing or certification requirements are not applicable to this unit.

### **Application of the Unit**

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

Work is performed without supervision, generally within a team environment. It involves the application of routine operational principles and procedures to the operation of the on-train remote control system as part of workplace activities across a variety of operational contexts within the Australian rail system.

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

### **Pre-Requisites**

Not Applicable

## **Employability Skills Information**

**Employability Skills**            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

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
<b>1 Position equipment and motive power unit/s</b>	<p>1.1 Remote control equipment and motive power units are positioned in required locations</p> <p>1.2 Brake test is conducted on each train section with the assistance of appropriate personnel</p> <p>1.3 Front and rear train consists are coupled together to form one train, applying safeworking techniques</p> <p>1.4 Relevant OH&amp;S requirements are followed to prevent injury and damage</p> <p>1.5 Relevant codes of practice and safeworking systems and requirements are followed</p>
<b>2 Monitor and operate remote control equipment</b>	<p>2.1 Motive power units and control system set-up are checked to ensure safe operational status</p> <p>2.2 Remote control equipment is operated and monitored in accordance with operational requirements during train movements to provide safe train handling and control</p> <p>2.3 Any operational difficulties encountered are addressed by re-establishing control of the motive power unit(s) with minimum risk to personnel and equipment</p>
<b>3 Shut down remote control equipment</b>	<p>3.1 Shut-down procedures of lead and remote control equipment are followed to ensure train security and de-activation of the system</p> <p>3.2 Equipment indicators or functions are operated to ensure the shut-down process is correct and complete</p>

## Required Skills and Knowledge

### REQUIRED KNOWLEDGE AND SKILLS

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

#### Required knowledge:

- Legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines
- Relevant OH&S and environmental procedures and regulations
- On-train remote control unit controls, instruments and indicators and their purpose, location and use
- Positioning procedures
- Shut-down procedures
- Braking and safety system procedures

## REQUIRED KNOWLEDGE AND SKILLS

- Procedures for the control of motive power units
- Procedures for the operation of remote control units
- Motive power operating techniques
- Procedures for managing hazardous situations involving on-line remote control systems
- Operational instructions
- Shunting and marshalling procedures
- Procedures for identifying equipment defects in remote control units and assessing for appropriate action including compatible coupling, braking and drive equipment, ancillary systems and signalling systems
- Procedures for operating electronic communications equipment with required protocol

### Required skills:

- Communicate effectively with others when operating on-train remote control system
- Read and interpret instructions, procedures, information and signs relevant to the operation of on-train remote control system
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the operation of on-train remote control system
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when operating on-train remote control system
- Promptly report and/or rectify any identified problems, faults or malfunctions when operating on-train remote control system in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events when operating on-train remote control system
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Monitor work activities in terms of planned schedule
- Modify activities depending on differing operational contingencies, risk situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Operate and adapt to differences in equipment in accordance with standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Judge train speeds and movements
- Monitor performance of equipment and take appropriate action if required

## 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
- Assessment must include exercises which demonstrate competent performance of the following in a range of situations:
  - operating remote control system in a range of configurations and/or trains
  - identifying possible operating difficulties that may occur during the operation using remote control
  - shutting down remote control system correctly

#### **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/or 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 equipment, and
  - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

#### **Method of assessment**

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:

## EVIDENCE GUIDE

- 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.

- |   |  |
|---|--|
| Operations may be conducted:  | <ul style="list-style-type: none"> <li>• by day or night</li> <li>• in all weather conditions</li> </ul>   |
| On-train remote control equipment is:   | <ul style="list-style-type: none"> <li>• that using any mechanism and operating system to allow the control of one motive power unit which is part of a train from another unit which is part of the same train</li> </ul>                                 |
| Motive power units include all motive power units in service within Australian rail systems and may include:      | <ul style="list-style-type: none"> <li>• diesel locomotives</li> <li>• electric locomotives</li> <li>• railcars</li> <li>• multiple units including electric</li> <li>• non-operational units</li> </ul>   |
| Remote control operation may be used:   | <ul style="list-style-type: none"> <li>• within a yard for the purpose of marshalling</li> <li>• shunting</li> <li>• on running lines</li> </ul>   |
| Action taken as a result of identified faults, defects or deficiencies may include:                               | <ul style="list-style-type: none"> <li>• carrying out repairs or adjustments, depending on the level and extent of work required</li> <li>• reporting to appropriate personnel</li> </ul>  |
| Depending on the type of organisation concerned and the local terminology used, workplace procedures may include: | <ul style="list-style-type: none"> <li>• company procedures</li> <li>• enterprise procedures</li> <li>• organisational procedures</li> <li>• established procedures</li> </ul>   |
| Safety and protective equipment may include:  | <ul style="list-style-type: none"> <li>• high visibility clothing</li> <li>• end of train markers</li> <li>• gloves</li> <li>• sunscreen</li> <li>• sunglasses</li> <li>• safety glasses</li> <li>• insect repellent</li> <li>• safety headwear</li> </ul> |

## RANGE STATEMENT

- Information/documents may include:
- safety footwear
  - portable radios/mobile phones
  - hand lamps
  - flags
  - safety devices
  - hearing protection
  - relevant log or record book
  - maintenance notices, records and requests
  - local instructions
  - equipment operation manuals
  - operational instructions, policies and procedures
  - emergency procedure manuals
  - two-way radio operation procedures
  - conditions of service, legislation and industrial agreements including workplace agreements and awards
- Applicable regulations and legislation may include:
- legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines
  - relevant state/territory codes of practice and safeworking system requirements
  - relevant Australian Standards and related requirements
  - relevant state/territory OH&S legislation
  - relevant state/territory environmental protection legislation

## Unit Sector(s)

Not Applicable

## Competency Field

Competency Field            C - Vehicle Operation