



**Australian Government**

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

# **TLIC4024A Operate urban passenger train**

**Release: 1**

## **TLIC4024A Operate urban passenger train**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit Descriptor**

This unit involves the skills and knowledge required to operate an urban passenger train in accordance with safeworking and regulatory requirements and workplace procedures. This includes driving an urban train efficiently and effectively; assisting passengers as required; carrying out pre- and post-operation checks and terminus inspections; responding effectively to abnormal situations, incidents and external operating factors; and stabling an urban train in accordance with workplace requirements. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

### **Application of the Unit**

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

Work is generally performed without direct supervision. It involves the application of routine operational principles and procedures to operate urban trains 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

### ELEMENT

### PERFORMANCE CRITERIA

#### 1 Drive urban train efficiently and effectively

- 1.1 Train is operated in accordance with the relevant codes of practice, workplace procedures and instructions
- 1.2 Train is operated safely within track/road characteristics and route conditions
- 1.3 Train operations are controlled to minimise wear and fuel use and avoid damage
- 1.4 Train is operated with due care for passenger comfort and quality of ride
- 1.5 Train is safely operated to specified timetable and schedule in accordance with on-time running standards
- 1.6 Performance of equipment and rolling stock is monitored to maintain optimum running conditions and identify faults, defects and efficiencies
- 1.7 Relevant codes of practice, OH&S and environmental requirements are followed to prevent injury and damage

#### 2 Assist passengers

- 2.1 Passenger needs when boarding the train are monitored and identified in accordance with workplace procedures and customer service standards
- 2.2 Passengers are given appropriate assistance in accordance with workplace procedures
- 2.3 Passengers with disabilities and/or difficulties are identified and given appropriate assistance when embarking/disembarking to/from the train
- 2.4 Where applicable, passengers are advised of station identification, emergency situations and other critical information, using the train communications system
- 2.5 Train control and other instructions are received, interpreted and applied to ensure safe and effective control of the train
- 2.6 Communications are maintained with traffic control and other relevant officers during the train journey in accordance with the workplace procedures, relevant codes of practice and safeworking systems
- 2.7 Instructions concerning train operation are given to relevant personnel to ensure safe and efficient on-time running

#### 3 Carry out train inspections

- 3.1 Pre- and post-operation checks and terminus inspections are carried out in accordance with workplace procedures
- 3.2 Train visual checks are made in accordance with workplace procedures
- 3.3 Problems and defects are identified and reported/rectified in accordance with workplace procedures, other regulatory requirements and manufacturers instructions

**ELEMENT****PERFORMANCE CRITERIA**

- 3.4 Cleanliness and tidiness of train are checked, if required, and appropriate action is taken to maintain quality standards in accordance with workplace procedures
- 3.5 Incidents or unusual occurrences are recorded and reported to relevant personnel in accordance with established policies and procedures
- 4 Respond effectively to abnormal situations and external operating factors**
- 4.1 Abnormal operating situations are identified and appropriate action is taken to report and/or respond to the situations in accordance with workplace procedures and regulatory requirements
- 4.2 Hazardous situations are recognised and appropriate action is taken to minimise risk to personnel and equipment in accordance with workplace procedures and OH&S and regulatory requirements
- 4.3 Safety and other incidents are identified and dealt with in accordance with workplace procedures and OH&S and regulatory requirements
- 4.4 Appropriate communications are maintained with relevant personnel during safety and other incidents in accordance with workplace procedures and OH&S and regulatory requirements
- 4.5 Instructions are verified, when required, interpreted and followed, in accordance with relevant codes of practice, safeworking systems and requirements and workplace policies and procedures, to ensure that actions taken are appropriate and safe
- 4.6 Fixed and hand signals and verbal movement commands are interpreted and followed, in accordance with relevant codes of practice, safeworking systems and workplace policies and procedures, to ensure that actions taken are appropriate and safe
- 4.7 Reports on safety and other incidents are completed and referred to appropriate personnel in accordance with workplace procedures and regulatory requirements
- 5 Stable urban train**
- 5.1 Urban train is stabled in accordance with workplace instructions and procedures
- 5.2 Post-operational checks of the train are conducted in accordance with workplace procedures
- 5.3 If required, problems and defects are identified and reported/rectified in accordance with workplace procedures, regulatory requirements and manufacturers instructions
- 5.4 Safety devices are activated or put in position to ensure the safety of personnel and equipment
- 5.5 Required documentation on train operations is completed in accordance with workplace 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:

- Applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines
- Relevant OH&S and environmental procedures and regulations
- Operational instructions including start-up and shut-down procedures
- Urban train operating procedures including driving procedures, braking and safety system procedures, operating controls to start, accelerate, decelerate and stop, complying with speed and load limits, adjusting controls to maximise efficient and safe running, managing hazardous situations and ancillary system procedures
- Procedures for operating electronic communications equipment with required protocol
- Procedures for pre-and post-operational checks
- Procedures for carrying out terminus checks
- Procedures for fuelling (where relevant) and lubrication of motive power units
- Procedures to be followed in the event of an emergency
- Train controls, instruments and indicators and their purpose, location and use
- Safe operational procedures and techniques for optimising efficiency, minimising wear and tear on rolling stock and motive power units, using route knowledge and terrain for advantage and optimising the quality of ride for passengers
- Route information including track/bridge limitations, speed limitations, gauge limitation, curves and gradients, location of signals and crossings, emergency cross-overs, track work along the route, reports of accidents or breakdowns along the route, typical problems that can occur along an urban train route and procedures for identifying and/or anticipating route problems and related action that can be taken
- Urban train operating equipment and systems including monitoring devices, braking and drive equipment, ancillary systems and signalling systems
- Customer services policies, standards and procedures

#### Required skills:

- Communicate effectively with others when operating an urban passenger train including the use of train communications equipment
- Read and interpret instructions, procedures, information and signs relevant to work activities
- Interpret and follow operational instructions and prioritise work

**Required skills:**

- Complete documentation related to urban passenger train operations
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when operating an urban passenger train
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems, faults or malfunctions when operating an urban passenger train in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events when operating an urban passenger train
- Respond appropriately to abnormal situations, safety incidents and emergencies
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Monitor and anticipate operational hazards and take appropriate action
- Modify activities to cater for variations in workplace contexts, route conditions and environment
- Apply fatigue management knowledge and techniques
- 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
- Monitor train performance to facilitate optimum safe operation and quality of ride to passengers (where applicable)
- Carry out required pre-operational, terminus and post-operational checks of train
- Apply route information to train operations
- Check and replenish fluids and carry out lubrication processes in the course of work activities

**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**

- 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:

## EVIDENCE GUIDE

### unit

- 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/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:
  - through activities in an appropriately simulated environment at the registered training organisation, 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.

Trains may be:

- any urban train operated in the Australian rail system

Operations may be conducted:

- by day or night in all relevant weather conditions

Safety devices may include:

- power brakes
- hand brakes



## RANGE STATEMENT

- chocks
  - lock-out equipment to prevent train from moving
  - emergency and safety equipment such as vigilance control and deadman relays
- Track/road characteristics include:
- track/bridge limitations
  - speed limitations
  - gauge limitation
  - curves and gradients
  - curfews
  - location of signals and crossings
  - emergency cross-overs
- Abnormal situations may include but are not limited to:
- technology failure
  - illness
  - signals in stop mode
  - assault
  - brawls
  - false alarm
  - passenger initiated alarm
  - track obstructions
  - passenger caught in self-closing doors
  - pedestrians crossing the track
  - suicide on the track
  - level crossing accidents
  - incorrect information or failure in communications
  - overhead wiring failure
- Relevant personnel can include:
- train controllers
  - train examiners
  - maintenance personnel
  - those providing operational assistance
  - signals staff
  - passengers
  - station staff
- Communication protocols may include but are not limited to:
- general safety
  - emergency messages
  - testing communications equipment
  - sending and receiving messages
  - identification
  - standard radio terms
  - phonetic alphabet
  - spoken figures

## RANGE STATEMENT

Communications equipment may include but is not limited to:

- train intercom
- hand-held or portable radio equipment
- fixed radio equipment
- computer-based communications equipment
- specialised testing facilities

Depending on the type of organisation concerned and the local terminology used, workplace procedures may include:

- company procedures
- enterprise procedures
- organisational procedures
- established procedures

Information/documents may include:

- applicable legislated rail safety requirements including acts and regulations from each state and territory together with any nationally approved compliance codes and/or guidelines
- operational instructions, protocols, policies and procedures, including:
  - train operation procedures
  - pre- and post-operation and terminus inspection procedures
  - procedures to prevent trains from moving unintentionally or against safeworking rules
  - track speed, length and limitations
  - procedures for monitoring and complying with signals
  - procedures for operating in accordance with track/route conditions
- train log or record book
- train running sheets
- procedures/instructions for dealing with emergencies or abnormal situations
- quality and customer service standards, policies and procedures
- maintenance notices, records and requests
- specified operating limits for trains
- local instructions
- communication equipment procedures
- equipment operation manuals and maintenance specifications
- conditions of service, legislation and industrial agreements including workplace agreements and awards
- relevant state/territory codes of practice and safeworking system requirements
- relevant Australian standards and related requirements

Applicable procedures and codes may include:

**RANGE STATEMENT**

including AS 4292 Part 1

- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation

**Unit Sector(s)**

Not Applicable

**Competency Field**

**Competency Field**                      C - Vehicle Operation