



Australian Government

Department of Education, Employment and Workplace Relations

TLIC3032A Operate and monitor a passenger electric tram

Release: 1

TLIC3032A Operate and monitor a passenger electric tram

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to operate and monitor a passenger electric tram in accordance with relevant workplace practices, tramway regulations and codes of practice. This includes planning and preparing the tram for passenger service, operating the tram, operating the revenue collection system (where applicable), monitoring the tram's performance during service, and communicating effectively with other personnel. This unit replaces the unit TDTC2201A Operate a passenger tram. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit

Application of the Unit

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, as well as relevant road rules and tramway regulatory requirements of the states/territories concerned.

Work is performed under minimal supervision, generally within a team environment. It involves the application of routine operational principles and procedures to operate and monitor a passenger electric tram across a variety of operational contexts.

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 Plan and identify a passenger electric tram for operations	1.1 Driving requirement is identified and confirmed from roster, shift-card or other authorised documentation 1.2 Sign-on/log-on procedures at the depot are completed and the tram to be driven is correctly identified and located 1.3 Resources are identified and obtained, including documentation 1.4 Procedures for reporting incidents and the cancellation and non-operation of services are identified and followed
2 Operate a passenger electric tram	2.1 Tram is operated within specifications and organisational requirements to meet required schedules, routes, timetables and special services 2.2 On-board equipment is confirmed as being serviceable, and is operated in accordance with specifications and organisation's requirements 2.3 Warning devices and gauges are monitored and responded to in accordance with organisation's requirements 2.4 Operational restrictions established by the organisation and relevant legislation are observed 2.5 Tram is stopped in designated and approved locations and within limitations, to permit safe embarkation and alighting of all kinds of passengers 2.6 Destination signs are adjusted in accordance with work schedules 2.7 Wheelchair equipment where provided is operated when required in accordance with workplace procedures
3 Respond effectively to external operating factors	3.1 Instructions are verified, when required, interpreted and followed, in accordance with relevant regulatory requirements and organisational policies and procedures, to ensure that actions taken are appropriate and safe 3.2 Fixed traffic and hand signals and verbal movement commands are interpreted and followed, in accordance with regulatory requirements and organisational policies and procedures, to ensure that actions taken are appropriate and safe 3.3 Hazardous situations are recognised and appropriate action is taken to minimise risk to personnel and equipment 3.4 Defensive driving practices are employed at all times
4 Operate revenue collection systems (where applicable)	4.1 Start-up check is completed in accordance with workplace procedures 4.2 Ticketing system is activated, operated and updated in accordance with workplace procedures 4.3 Ticketing system defects are reported in accordance with

ELEMENT	PERFORMANCE CRITERIA
	workplace procedures 4.4 Ticketing system is closed down, in accordance with authorised organisation procedures
5 Operate and monitor on-board equipment	5.1 Electric tram equipment is monitored and operated to maintain optimum running conditions and identify faults, defects and deficiencies 5.2 Appropriate action is taken in response to identified faults, defects and deficiencies to ensure safe operation of tram, including communications with operations controller where necessary 5.3 Faults, defects and deficiencies are assessed to determine risk of damage to equipment or injury to personnel 5.4 Defects are reported and/or recorded
6 Work collaboratively with other personnel (where applicable)	6.1 Safe operation and monitoring of the tram is maintained in collaboration with other members of the tram crew, tram controllers and other relevant personnel as per workplace requirements 6.2 Any potential or actual conflicts or grievances with other members of the tram crew, tram controllers and other relevant personnel during the operation of the tram are recognised and resolved in accordance with workplace procedures
7 Communicate with tram crew and other personnel	7.1 Regular communication is maintained with tram crew, drivers of other passenger electric trams and other relevant personnel in the course of operation of the tram as per workplace procedures and regulatory requirements 7.2 Tram crew, tram controllers, drivers of other passenger electric trams and other relevant personnel are advised of operational problems, delays, safety incidents and emergency situations that may arise in the course of operation of the tram 7.3 Information provided by tram crew, drivers of other passenger electric trams and other relevant personnel relevant to the ongoing operation of the passenger electric tram is interpreted and applied to driving activities as per workplace procedures and applicable regulatory requirements
8 Follow all applicable tramway regulatory requirements	8.1 Tramway regulatory requirements applicable to the operation of the tram and the track or road concerned are accessed, understood and interpreted 8.2 Relevant tramway regulatory requirements are applied and followed in the course of operation of the passenger electric tram

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 road rules of the relevant state/territory roads and traffic authority, where applicable
- Relevant state/territory roads and traffic authority and tramway operating procedures
- Relevant OH&S and environmental procedures and regulations
- Relevant driver identification procedures, licences and authorities required to drive an electric tram
- Passenger electric tram controls, instruments and indicators and their purpose, location and use including controls to start, accelerate, decelerate and stop the tram
- Passenger electric tram operating characteristics, capabilities and limitations
- Procedures for operating and monitoring the passenger electric tram
- Procedures for adjusting controls to maximise efficient and safe running
- Speed and load limits for the tram
- Operational instructions
- Procedures for managing safety incidents and hazardous situations that may arise when operating and monitoring a passenger electric tram
- Procedures for operating and monitoring ancillary equipment on the tram
- Functions of sand as used on an electric tram and the procedures for checking and refilling sand levels and carrying out sand system testing processes on a passenger electric tram
- Passenger electric tram knowledge may include monitoring devices, braking and drive equipment, ancillary systems and signalling systems
- Track, road and route knowledge including: track limitations, speed limitations, curves and gradients and location of any signals, indicators and points
- Procedures for identifying equipment defects and assessing for appropriate action
- Typical defects that can occur on a passenger electric tram and related action that should be taken
- Principles of defensive driving
- Procedures to be followed in the event of an emergency when operating a passenger electric tram
- Procedures for operating any electronic communications equipment with required protocol
- Fatigue management knowledge and techniques including: causes and effects of fatigue; strategies to manage fatigue; factors which increase fatigue-related accidents; and lifestyles which promote the effective long term management of fatigue

Required skills:

- Communicate effectively with others when operating and monitoring a passenger electric tram
- Operate any electronic communication equipment to required protocol
- Read and interpret instructions, procedures, information and signs relevant to the operation and monitoring of a passenger electric tram
- Interpret and follow instructions and prioritise work
- Complete documentation related to the operation and monitoring of a passenger electric tram
- Work collaboratively with others when operating and monitoring a passenger electric tram
- Identify and assess tram defects and deficiencies and take appropriate action to report any identified defective equipment as per workplace procedures
- Implement contingency plans for unplanned events
- Apply precautions and required action to minimise, control or eliminate hazards that may exist when operating and monitoring a passenger electric tram
- Recognise problems that may arise when operating and monitoring a passenger electric tram and take appropriate action
- Check and refill sand boxes where provided and carry out sand system testing processes on a passenger electric tram
- Modify activities depending on differing operational contingencies, risk situations and environments
- Adapt to differences in trams and associated equipment and procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Operate a passenger electric tram and monitor its performance to facilitate optimum safe operation
- Apply track and road knowledge when driving a passenger electric tram
- Monitor journey schedule
- Apply fatigue management knowledge and techniques

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.

Operations may be conducted:

- by day or night in all relevant weather conditions

Passenger electric trams include all passenger electric trams in service within Australian transport

- hand-operated or foot pedal control systems or both

RANGE STATEMENT

systems and may include:

- | | |
|---|---|
| <p>Passenger electric tram equipment may include:</p> | <ul style="list-style-type: none"> • ancillary systems • automatic control systems • braking systems • drive systems • instrumentation • manual controls • communication systems • warning equipment • power source • vigilance systems • traction systems |
| <p>Action taken upon the identification of faults, defects or deficiencies may include:</p> | <ul style="list-style-type: none"> • reporting the problem and carrying out repairs (depending on the level and extent of work required), or isolating the faulty equipment and advising appropriate personnel of the fault and need for repair or replacement |
| <p>Relevant personnel may include:</p> | <ul style="list-style-type: none"> • tram crew • tram controllers • rostering supervisors and staff • other tram drivers and crews • depot coordinators • supervisors and other operational personnel • maintenance personnel • immediate internal or external customers • internal and external suppliers |
| <p>Risk minimisation may require differentiating between faults, defects and deficiencies that:</p> | <ul style="list-style-type: none"> • do not present a hazard and could be attended to under running maintenance or in a normal maintenance schedule • present a potential hazard and need to be attended to under running maintenance or at the next most practical opportunity • present an immediate hazard and require immediate attention |
| <p>Depending on the organisation concerned workplace procedures may be called:</p> | <ul style="list-style-type: none"> • standard operating procedures • company procedures • enterprise procedures • organisational procedures • established procedures |
| <p>Information and documents may include:</p> | <ul style="list-style-type: none"> • relevant National and state or territory transport regulations and codes of practice • notices in drivers' notice board/box |

RANGE STATEMENT

- Applicable legislation, regulations and codes may include:
- reference cards
 - tram driver roster sheet and/or table card
 - operational instructions, policies and procedures:
 - emergency procedures manual
 - conditions of service, legislation and industrial agreements including workplace agreements and awards
 - 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 state/territory road rules and tramway codes of practice
 - 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