



Australian Government

TLIC0006 Set up rail traffic for autonomous operation

Release: 1

TLIC0006 Set up rail traffic for autonomous operation

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Application

This unit involves the skills and knowledge required to set up autonomous systems for rail traffic operation.

It includes identifying rail traffic for autonomous operation, setting up rail traffic for autonomous mission, and monitoring and reporting autonomous rail traffic operations.

This unit defines rail traffic as a train.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice and/or guidelines.

Pre-requisite Unit

Not applicable.

Competency Field

C - Vehicle Operations.

Unit Sector

Rail Sector.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Verify rail traffic for autonomous operation

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Rail traffic location is determined

1.2 Hazards are identified, risks assessed and control

- measures implemented
- 1.3** Rail traffic is accessed in accordance with workplace procedures
 - 1.4** Rail traffic location is verified
- 2 Set up rail traffic for autonomous mission**
- 2.1** Functions of equipment, component parts and accessories are identified
 - 2.2** Applications of autonomous activities of different infotechnology equipment and systems are interpreted
 - 2.3** Equipment is set up for autonomous operation in accordance with workplace procedures and manufacturer specifications
 - 2.4** Routine faults in operating systems, software applications and operator errors are identified and rectified in accordance with workplace procedures
 - 2.5** Autonomous systems are identified as working and active on the rail traffic
 - 2.6** Situational awareness is applied through effective visual scans, use of communication systems, use of rail traffic information and use of systems of safe working in accordance with workplace procedures
 - 2.7** Safety critical communication is undertaken with network control officer or relevant person to validate data
 - 2.8** Autonomous train operational capabilities are monitored and continually evaluated, including visual indicators that rail traffic is now autonomous
 - 2.9** Rail traffic is set to autonomous operations and driving cab is locked and secured for operation
- 3 Monitor and report autonomous traffic operations**
- 3.1** Rail traffic readiness for mission is communicated in accordance with workplace protocols whilst standing in a safe place
 - 3.2** Lights and sound devices are confirmed active on the rail traffic as it departs
 - 3.3** Communication is maintained with relevant personnel and clarification is sought about anything that is not clear in relation to processes and procedures

- 3.4 Autonomous rail traffic is visually inspected on departure in accordance with workplace procedures
- 3.5 Records are updated in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit Mapping Information

This is a new unit. No equivalent unit.

Links

Companion Volume Implementation Guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>

Assessment Requirements for TLIC0006 Set up rail traffic for autonomous operation

Modification History

Release 1. This is the first release of this unit of competency in the TLI Transport and Logistics Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least one occasion and include:

- accessing the human machine interface onboard and enter the correct train data
- accessing the rail traffic safely
- acknowledging the communications within the rail traffic, including confirming screen is active and that all systems on the train have received the correct data and are ready for autonomous operation
- communicating the rail traffic is ready for departure or operations
- confirming departure and lights and sound devices are active on the rail traffic as it departs
- confirming visual indicators that rail traffic is now autonomous
- engaging in safety critical communication to validate data
- identifying the autonomous systems are working and active on the rail traffic
- leaving and locking the rail traffic
- moving to a safe place
- setting final rail traffic switches to autonomous operations
- setting the rail traffic to autonomous.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- emergency response procedures
- isolation systems
- operational requirement of autonomous rail traffic, including rail traffic mission and journey
- relevant autonomous rail traffic workplace procedures and manufacturer specifications
- relevant network safety management system
- relevant work health and safety (WHS)/occupational health and safety (OHS) procedures and regulations
- typical minor repair problems that can occur, and appropriate remedial action that should be taken
- workplace documentation and record requirements.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in rail workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate rail workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, autonomous equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including legislation, regulations, codes of practice, workplace procedures and operation manuals.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>