



Australian Government

TLIK0002 Managing autonomous rail traffic operations by network control

Release: 1

TLIK0002 Managing autonomous rail traffic operations by network control

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 manage autonomous rail traffic operation by network control.

It includes validating rail vehicle for autonomous operation, setting up rail traffic system for autonomous mission, ending autonomous system journey and monitoring and reporting autonomous rail traffic operations.

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

K - Technology

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 Autonomous rail traffic and train data is identified and registered

- | | | |
|----------|--|---|
| | 1.2 | Rail traffic position is verified |
| | 1.3 | Rail traffic mission is validated from schedule or day of operation plan |
| 2 | Set up rail traffic system for autonomous mission | 2.1 Mission hazards are identified in accordance with safety management system |
| | 2.2 | Safety critical communication is undertaken with relevant person |
| | 2.3 | Applications for autonomous activities of different infotechnology equipment and systems are interpreted |
| | 2.4 | Equipment is set up for autonomous operation in accordance with workplace procedures and manufacturer specifications |
| | 2.5 | Autonomous rail traffic data is validated in accordance with workplace protocols |
| | 2.6 | Autonomous systems are identified as working and active on the rail traffic |
| | 2.7 | Factors that impact safe rail traffic systems are continuously monitored |
| | 2.8 | Routine faults in operating systems and software applications are identified and rectified in accordance with workplace procedures |
| 3 | End autonomous rail traffic system mission | 3.1 Autonomous rail traffic end of mission is determined |
| | 3.2 | Safety critical communication is undertaken with relevant person |
| | 3.3 | Autonomous rail traffic system is disengaged |
| | 3.4 | Autonomous rail traffic data is validated in accordance with workplace protocols |
| | 3.5 | Routine faults in operating systems, software applications and operator errors are identified and rectified in accordance with workplace procedures |
| 4 | Monitor and report autonomous rail traffic operations | 4.1 Rail traffic operation is communicated in accordance with workplace safety critical communication protocols |

- 4.2 Effective communication is maintained with relevant personnel
- 4.3 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 TLIK0002 Managing autonomous rail traffic operations by network control

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:

- allocating rail traffic consists
- changing status of rail traffic
- confirming and validating data
- confirming rail traffic is stationary
- controlling and coordinating recovery
- ending the autonomous rail traffic operations including mission
- entering rail traffic data
- following autonomous rail traffic operation procedures
- handing over of autonomous rail traffic operations to and from another operator
- monitoring rail traffic
- reading and interpreting relevant instructions, procedures and manufacturer information
- responding to fault alarms
- setting up autonomous rail traffic operations including mission and journey.

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
- 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 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 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, 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>