



Australian Government

TLIW5003 Manage rail network control systems

Release: 1

TLIW5003 Manage rail network control systems

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 rail network control systems, in accordance with workplace procedures and regulatory requirements.

It includes identifying network control and train control systems and their functions.

This unit involves rail network control systems and applications. It can be applied to networks supporting heavy haul, freight or passenger rail services.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

W – Equipment and Systems Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

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

1 Manage network control systems and their components

- 1.1 Purpose of network control systems and their functions are identified and explained
- 1.2 Different types of network control systems are identified and discussed
- 1.3 Components of each type of network control system are

identified and explained

- 1.4 Principles and major components of interlocking systems are identified, explained and used as the foundation for decision making
- 1.5 Safety implications associated with different types of signalling and interlocking systems are identified and used to guide decision making

2 Manage operation of train control systems

- 2.1 Functions of train control systems are identified and explained
- 2.2 Main components of a train control system and their purpose are identified and explained
- 2.3 Interaction of train control systems with rail operations is identified, explained and used as the basis for decision making
- 2.4 Hazards are identified, risks are assessed and control measures are implemented
- 2.5 Possible impact train control systems can have on rail operations are identified, explained and taken into consideration in decision making

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.

Non-essential conditions can be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to TLIW5003A Manage rail network control systems.

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 TLIW5003 Manage rail network control systems

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 and using rail industry standards and safety management systems (SMSs)
- applying relevant safeworking and workplace procedures
- communicating effectively with others and interpreting complex information relating to rail operations
- identifying job hazards and taking required action to minimise, control or eliminate identified hazards
- managing rail network control and train control systems and their functions
- researching relevant information
- reviewing regulatory information changes.

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:

- duty holders and their duties under rail safety legislation
- information to manage rail network control systems
- key concepts and definitions relating to rail assets and interfaces
- key principles and practices associated with railway operations
- key rail industry regulatory requirements and standards
- rail industry and rail industry terminology, including terminology used in rail industry standards
- rail regulatory framework
- rail safety operating principles
- rail system interoperability
- rail SMSs.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the *Standards for Registered Training Organisations* current at the time of assessment.

Assessment must occur in rail workplace operational situations or, where this is not available, in simulated workplace operational situations that replicate rail network control 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 include:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, regulations, rail industry standards, codes of practice 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>