



Australian Government

TLIW5002 Manage rail assets and interfaces

Release: 1

TLIW5002 Manage rail assets and interfaces

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 assets and interfaces, in accordance with workplace procedures and regulatory requirements.

It includes managing rail infrastructure fixed assets and maintenance regimes; managing rail operation fixed assets and management regimes; applying reliability, availability, maintainability and safety of rail infrastructure; and managing wheel rail interface.

This unit involves knowledge of rail assets in general terms. It covers the different rail infrastructure and operational components and can be applied to freight, heavy haul or passenger rail systems.

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.

1 Manage rail infrastructure fixed assets and maintenance regimes

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

1.1 Components and functions of track and track bed are identified and explained

1.2 Electrical infrastructure components and functions

are identified are explained

1.3 Other fixed assets and their functions are identified and explained

1.4 Hazards are identified, risks are assessed and control measures are implemented

1.5 Organisational track inspection methodologies are identified, analysed and recommendations for improvement are made to management as required

1.6 Inspection and maintenance regimes for other assets are identified, analysed and recommendations for improvement are made to management as required

2 Manage rail operation fixed assets and management regimes

2.1 Rail operation assets and their individual life cycles are identified and explained

2.2 Asset maintenance plans are identified, accessed and implemented

2.3 Processes to monitor asset utilisation and their effectiveness in meeting operational needs are identified and followed

2.4 Potential conflict between operational asset utilisation and maintenance requirements are identified, explained and managed

2.5 Organisational technologies and processes that could enhance asset utilisation are identified, analysed and recommended to management

2.6 Inspection and maintenance regimes for other assets are identified and analysed

3 Apply reliability, availability, maintainability and safety of rail infrastructure

3.1 Concepts related to rail infrastructure reliability, availability, maintainability and safety (RAMS) are identified and explained

3.2 Risk assessment is undertaken in relation to rail infrastructure RAMS

3.3 Programs are developed and implemented to ensure rail infrastructure RAMS are applied

3.4 Impacts of safety requirements on rail network are identified, explained and taken into consideration

4 Manage wheel rail interface

- 4.1 Wheel rail interface is identified and explained
- 4.2 Defects and problems related to wheel rail interface are anticipated and rectified, and preventative programs are developed and implemented
- 4.3 Impacts of poor management of wheel rail interface are identified and explained
- 4.4 Damage that can be caused by poor wheel rail interface is identified and explained
- 4.5 Methods for measuring and maintaining rail profiles are identified and applied
- 4.6 Methods for maintaining rolling stock wheels are identified and applied

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 TLIW5002A Manage rail assets and interfaces.

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 TLIW5002 Manage rail assets and interfaces

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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 safety industry standards
- 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 infrastructure fixed assets and maintenance regimes to ensure reliability, availability, maintainability and safety (RAMS) of rail infrastructure assets
- managing rail operation fixed assets and maintenance regimes to ensure RAMS of rail operations assets
- managing wheel rail data and interface.

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:

- asset management policy and processes that address all phases of the asset life cycle of the rail infrastructure or operations
- duty holders and their duties under rail safety legislation
- 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 infrastructure reliability, availability, maintainability and safety (RAMS) concepts
- rail regulatory framework
- rail safety management systems (SMSs)

- relevance of standards to the rail industry
- relevant information to manage rail assets and interfaces.

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.

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Assessment must occur in rail workplace operational situations or, where this is not available, 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 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

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