



**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.

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

### **1 Manage rail infrastructure fixed assets and maintenance regimes**

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>