

## Qualification Description

This is a general qualification for a person engaged in basic operations within the rail infrastructure environment undertaking a range of tasks involving known routines and procedures, and taking some responsibility for the quality of work outcomes.

Job roles and titles vary across different sectors. Possible job titles relevant to this qualification include:

### Rail Infrastructure – Track Work

- Track Worker
- Track Installer
- Track Maintainer

### Rail Infrastructure – Track Surfacing

- Track Machine Operator
- Plant Operator
- Mobile Plant Operator
- Way Gang Driver.

## Entry Requirements

There are no entry requirements for this qualification.

## Network Entry Requirements

A Category 1 Rail Medical Assessment is required for this qualification in most cases.

## Packaging Rules

The packaging rules in the Training Package are as follows:

A total of **16 units of competency** comprising:

**7 core units** listed below **plus**

**All units** within one of the **specialist elective unit groups** (job roles) from Group A, Group B or Group C listed below **plus**

**3 general elective units** from the general elective units listed below if selecting Group A or Group C **or**

**4 general elective units** from the general elective units listed below if selecting Group B.

The **general elective units** may be selected from any relevant nationally endorsed Training Package. The general elective units must contribute to the vocational outcomes of the qualification.

Please note: Railtrain does not deliver the specialist elective units in Group B nor all the general elective units listed in the Training Package. The units delivered by Railtrain are listed below, and include all the specialist elective units in Groups A and C, as well as the general elective units nominated.

## Core units

TLIB1028	Maintain and use hand tools
TLID1001	Shift materials safely using manual handling methods
TLIE1003	Participate in basic workplace communication
TLIF1001	Follow work health and safety procedures
TLIF2010	Apply fatigue management strategies
TLIF2080	Safely access the rail corridor
TLIU2008	Apply environmental procedures to rail infrastructure

## Specialist elective units

All units from one specialist elective groups

### Group A: Track Work

TLIB2085	Apply track fundamentals
TLIB2092	Operate minor mechanical equipment
TLIS2030	Carry out track ballasting
TLIS2031	Install railway sleepers
TLIS2034	Install and repair rail fastening systems
TLIS2044	Carry out rail installation

### Group C: Track Surfacing

TLIB1093	Clean equipment and restore worksite
TLIB2001	Check and assess operational capabilities of equipment
TLIB2085	Apply track fundamentals
TLIB2091	Measure and record track geometry
TLIS2030	Carry out track ballasting
TLIC2058	Travel medium or heavy self-propelled on-track equipment
OR	
TLIC2059	Propel and operate light on-track equipment

### General elective units

TLIF2062	Apply awareness of safeworking rules and regulations
TLIW2001	Operate under track protection rules
TLIB2001	Check and assess the operational capability of equipment

## Core Units

### *TLIB1028 Maintain and use hand tools*

This unit involves the skills and knowledge required to maintain and use hand tools in accordance with workplace procedures and safeworking codes across a variety of operational workplace contexts within the transport and logistics industry.

It includes selecting and using hand tools to complete workplace tasks, maintaining basic hand tools in accordance with manufacturer's instructions, and securing and storing hand tools in accordance with workplace procedures.

Work is performed under some supervision, generally within a team environment.

### *TLID1001 Shift materials safely using manual handling methods*

This unit involves the skills and knowledge required to shift loads safely using manual handling methods.

Work must be carried out in compliance with the relevant work health and safety (WHS)/occupational health and safety (OHS) regulations concerning the manual handling and movement of loads.

It includes assessing the risks associated with relocating the load, planning the relocation process and carrying out the relocation in accordance with the plan.

Work is performed under some supervision generally within a team environment.

## *TLIE1003 Participate in basic workplace communication*

This unit involves the skills and knowledge required to participate effectively in basic workplace communication as an integral part of routine work in the context of the workplace concerned. It includes communicating information about routine tasks, processes, events or skills; participating in group discussions to achieve appropriate work outcomes; and representing group views to others. Work is performed under some supervision, generally within a team environment.

## *TLIF1001 Follow work health and safety procedures*

This unit involves the skills and knowledge required to follow and apply work health and safety (WHS)/occupational health and safety (OHS) procedures when carrying out work activities in compliance with the relevant WHS/OHS regulations and procedures. It includes following workplace procedures for hazard identification and risk control, contributing to WHS/OHS management arrangements and completing WHS/OHS records. Work is performed under some supervision generally within a team environment. It involves applying established WHS/OHS and hazard minimisation principles and procedures to conduct workplace activities.

## *TLIF2010 Apply fatigue management strategies*

This unit involves the skills and knowledge required to apply fatigue management strategies within the transport and logistics industry. Work is undertaken in compliance with relevant legislation, regulations, codes and guidelines. It includes identifying and acting on signs of fatigue and implementing appropriate strategies to minimise fatigue during work activities, in particular when operating equipment, trains, vehicles, load shifting equipment, marine vessels and aircraft. Work is performed under some supervision generally within a team environment.

## *TLIF2080 Safely access the rail corridor*

This unit involves the skills and knowledge required to enter the rail corridor. It includes taking appropriate safety precautions to:

- access the danger zone
- access the rail corridor
- respond appropriately in an emergency.

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, rules and/or guidelines. This unit involves the application of Rail Infrastructure Manager rules, procedures and protocols for rail safety. This unit applies to all people accessing the rail corridor.

## *TLIU2008 Apply environmental procedures to rail infrastructure*

This unit involves the skills and knowledge required to care for the environment during rail infrastructure maintenance and construction activities in accordance with rail network standards, safeworking and regulatory requirements, and workplace procedures. It includes minimising the effects of pollution during work, and transporting and handling hazardous materials safely in accordance with environmental protection regulations and guidelines. Work must be carried out in accordance with relevant state/territory environmental protection regulations and workplace procedures. Work is performed under some supervision generally within a team environment.

## Specialist elective units

### Group A: Track Work

#### *TLIB2085 Apply track fundamentals*

This unit involves the skills and knowledge required to apply fundamentals of track maintenance and construction, and to carry out basic track measurement, in accordance with approved rail industry standards, safeworking and regulatory requirements, and workplace procedures.

It includes identifying track terminology, track components and track tools and equipment; and undertaking basic track measurement.

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.

Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures to the fundamentals of track maintenance and construction, as part of workplace activities across a variety of operational contexts within the Australian rail system.

#### *TLIB2092 Operate minor mechanical equipment*

This unit involves the skills and knowledge required to operate and maintain minor mechanical equipment in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes carrying out pre-operation checks on equipment, operating mechanical equipment, conducting routine maintenance, and securing and storing equipment.

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.

Work is performed under some supervision, generally within a team environment. It involves the application of routine procedures when operating and maintaining minor mechanical equipment across a variety of operational contexts.

#### *TLIS2030 Carry out track ballasting*

This unit involves the skills and knowledge required to carry out track ballasting manually and mechanically in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes determining the job requirements, carrying out the ballast activity in accordance with work orders, and completing all required documentation.

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.

Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures when carrying out track ballasting, as part of workplace activities across a variety of operational contexts within the Australian rail system.

Operators of mechanised equipment must have undertaken training and, where appropriate, hold the relevant licence, permit or certificate and be recognised as competent for the class of machinery being used.

## *TLIS2031 Install railway sleepers*

This unit involves the skills and knowledge required to install railway sleepers manually or mechanically in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes preparing for work, restoring track gauge, installing or replacing sleepers and completing documentation.

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.

Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures when installing railway sleepers, as part of workplace activities across a variety of operational contexts within the Australian rail system.

Operators of mechanised equipment must have undertaken training and, where appropriate, hold the relevant licence, permit or certificate and be recognised as competent for the class of machinery being used.

## *TLIS2034 Install and repair rail fastening systems*

This unit involves the skills and knowledge required to install and repair rail fastening systems in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes identifying work requirements, installing the fastening system, repairing the fastening system and completing all required documentation.

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.

Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures when installing and repairing rail fastening systems, as part of workplace activities across a variety of operational contexts within the Australian rail system.

Operators of mechanised equipment must have undertaken training and, where appropriate, hold the relevant licence, permit or certificate and be recognised as competent for the class of machinery being used.

## *TLIS2044 Carry out rail installation*

This unit involves the skills and knowledge required to install rail in accordance with safeworking and regulatory requirements, and organisational policies and procedures.

It includes identifying job requirements, preparing rail for installation, installing rail, joining rail ends, restoring track and completing documentation.

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

Work is performed under supervision, generally in a team environment. It involves the application of routine operational principles and procedures when installing rail, as part of workplace activities across a variety of operational contexts within the Australian rail system.

## Group C: Track Surfacing

### *TLIB1093 Clean equipment and restore worksite*

This unit involves the skills and knowledge required to clean up plant, equipment and worksite in accordance with safeworking and regulatory requirements, and workplace procedures. It includes planning and preparing work, arranging the clear up and disposal/reclamation of material, operating cleaning equipment and mobile plant, finalising the work and restoring the site. Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures when cleaning up plant, equipment and worksite, as part of workplace activities across a variety of operational contexts within the Australian rail system.

### *TLIB2001 Check and assess operational capabilities of equipment*

This unit involves the skills and knowledge required to check and assess the operational capabilities of equipment in accordance with regulations, workplace procedures and requirements within the transport and logistics industry. It includes inspecting equipment and the work area, checking the operational capability of equipment and its safety devices, identifying and assessing the impact of faults on safety and work requirements, and recording and reporting inspection and testing results. Safety checks and equipment tests are performed under limited supervision.

### *TLIB2085 Apply track fundamentals*

This unit involves the skills and knowledge required to apply fundamentals of track maintenance and construction, and to carry out basic track measurement, in accordance with approved rail industry standards, safeworking and regulatory requirements, and workplace procedures. It includes identifying track terminology, track components and track tools and equipment; and undertaking basic track measurement. 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. Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures to the fundamentals of track maintenance and construction, as part of workplace activities across a variety of operational contexts within the Australian rail system.

### *TLIB2091 Measure and record track geometry*

This unit involves the skills and knowledge required to measure and record track geometry in accordance with safeworking and regulatory requirements, and workplace procedures. It includes measuring and recording track geometry, and reporting results. 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. Work is performed under minimal supervision, generally within a team environment. It involves the application of routine operational principles and procedures when measuring and recording track geometry, across a variety of operational contexts within the Australian rail system.

## *TLIS2030 Carry out track ballasting*

This unit involves the skills and knowledge required to carry out track ballasting manually and mechanically in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes determining the job requirements, carrying out the ballast activity in accordance with work orders, and completing all required documentation.

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.

Work is performed under some supervision, generally within a team environment. It involves the application of routine operational principles and procedures when carrying out track ballasting, as part of workplace activities across a variety of operational contexts within the Australian rail system.

Operators of mechanised equipment must have undertaken training and, where appropriate, hold the relevant licence, permit or certificate and be recognised as competent for the class of machinery being used.

## *TLIC2058 Travel medium or heavy self-propelled on-track equipment*

This unit involves the skills and knowledge required to travel a medium or heavy self-propelled on-track vehicle on a rail network in accordance with the rail network owner policies and procedures.

It includes performing pre-operating checks, obtaining appropriate authority to travel, stabling medium or heavy self-propelled on-track vehicle, performing post-operational procedures and completing documentation.

This unit involves the application of Rail Infrastructure Manager operational procedures to travel a medium or heavy self-propelled on-track vehicle, as part of workplace activities across a variety of operational contexts.

Medium or heavy self-propelled on-track vehicles may include:

- ballast cleaner
- ballast regulator
- dynamic stabiliser
- inserter/remover (TR10)
- rail crane
- rail grinder
- spot tamper
- tamper
- track layer
- track recorder.

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 to operate each individual piece of equipment.

Operators will need to have fulfilled licence and certification requirements for the type of equipment being used.

## *TLIC2059 Propel and operate light on-track equipment*

This unit involves the skills and knowledge required to propel and operate light on-track equipment as part of workplace activities across a variety of rail operational contexts.

It includes performing pre-operational equipment checks, obtaining approval to place equipment on track, operating light equipment on track and stabling or moving equipment off track.

Light on-track equipment is considered to be less than 10 tonnes that may be lifted on or off track mechanically and may include:

- ballast scarifiers
- dog screw setters/drivers
- joint lifters
- multi-spindle borers
- power track jacks
- profile grinders
- rail-mounted compressors
- small sleeper spacers
- spike drivers
- spike pullers (ride on)
- various fastening applicators.

Light on-track equipment requires a basic operator skill level in manipulation, coordination, alignment and functional activity, with little complexity or variance in overall activity. This typically covers equipment carrying out basic repetitive and alignment type activities.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements, to comply with relevant codes of practice and/or guidelines, and to meet organisational requirements to operate each individual piece of equipment.

Operators will need to have fulfilled licence and/or certification requirements for the type of equipment being used.

## **General elective units not previously listed**

### *TLIF2062 Apply awareness of safeworking rules and regulations*

This unit involves the skills and knowledge required to apply a basic awareness of applicable safeworking rules and regulations to work functions in the rail industry.

It includes interpreting and applying safeworking rules and protocols, recognising and reporting unsafe situations, following safeworking procedures, and taking appropriate safety precautions.

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, rules and/or guidelines.

Work is performed under established procedures, with accountability and responsibility for self and others in achieving the prescribed outcomes within the limits of duty of care responsibility.

### *TLIW2001 Operate under track protection rules*

This unit involves the skills and knowledge required to operate under track protection rules in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes accessing and interpreting information about track protection requirements, carrying out assigned protection and/or work activities, and responding appropriately to safety incidents and abnormal situations.

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.

Work is performed under some supervision, generally within a team environment.



It involves the application of relevant track protection rules and requirements to assigned track work activities across a variety of operational contexts within the Australian rail system.

## *TLIC3045 Operate road/rail vehicle*

This unit involves the skills and knowledge required to operate road/rail vehicles on-track in accordance with safeworking and regulatory requirements, and workplace procedures.

It includes performing pre-operational and post-operational checks, on-tracking and off-tracking vehicles, operating equipment, and completing required documentation. It encompasses the operation of all road/rail on-track vehicles.

It involves the application of routine operational principles and procedures when operating road/rail vehicles as part of workplace activities across a variety of operational contexts.

A road vehicle fitted with retractable rail guidance wheels (also known as a hi-rail vehicle) and may also involve:

- excavators
- four-wheel drives
- light–medium rigid vehicles
- pettibone
- tractors
- weed sprayer.

People achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety and safeworking requirements and to comply with relevant codes of practice and/or guidelines. Operators of road/rail vehicles may need to have applicable road and/or high-risk licence or certification requirements for the type of vehicle being used.

## *TLIF0008 Apply safety critical communications in the rail environment*

This unit involves the skills and knowledge required to apply effective safety critical communications and is also considered best practice for general communications in the rail environment.

It includes communicating, providing timely and accurate rail operational information and responding to unplanned situations or events appropriately.

This unit is intended for rail safety workers who are required to identify and respond to operational information as part of their job role. They may be working within a rail operational or infrastructure environment.

Safety critical communications is any communication that, if not delivered or not delivered accurately or promptly, could result in death, serious injury or incur significant damage to property, infrastructure or the environment.

## *TLIG1001 Work effectively with others*

This unit involves the basic skills and knowledge required to work effectively with others using established procedures and appropriate interpersonal skills to assist others to complete work tasks, in accordance with workplace procedures and relevant regulatory requirements.

It includes contributing to determining appropriate work roles, planning activities and working with others to complete activities.

Work is performed under some supervision, generally within a team environment.

## Traineeship Fees and Charges

Publicly Funded



Qualification		Publicly funded VET in Western Australia	
		Non-Concession	Concession
TLI21315	Certificate II in Rail Infrastructure	\$1667.25	\$497.61
	Resource fees		

The Student tuition fees are indicative only and are subject to change given individual circumstances at enrolment. Additional fees may apply such as Student service and resource fees.

Link to view [Western Australia's VET fees and charges policy](#)

## Employer Fee for Service

Please contact [training@railtrain.com.au](mailto:training@railtrain.com.au) or call 089470 4999 to discuss your training needs and scheduling requirement.