



Australian Government

TLIS3029 Implement structures maintenance and installation of minor structures

Release: 2

TLIS3029 Implement structures maintenance and installation of minor structures

Modification History

Release 2. This is the second release of this unit of competency in the TLI Transport and Logistics Training Package:

- Minor statement changes in Assessment Conditions.

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 implement structures maintenance and installation of minor structures in accordance with rail network standards, safeworking and regulatory requirements, and workplace procedures.

It includes planning work, implementing maintenance activities, dealing with maintenance and construction problems, and completing required 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 minimal supervision, generally in a team environment. It involves the application of routine operational principles and procedures when implementing structures maintenance and installing minor structures, as part of workplace activities across a variety of operational contexts within the Australian rail system.

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

Pre-requisite Unit

Not applicable.

Competency Field

S – Construction and Installation

Unit Sector

Rail sector.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Plan work

- 1.1** Scope of work is confirmed
- 1.2** Hazards are identified, risks are assessed and control measures are implemented
- 1.3** Operational constraints are identified
- 1.4** Information requirements are identified and accessed
- 1.5** Method of work is selected and general operating sequence is determined
- 1.6** Resources required for the work are arranged

2 Implement maintenance and construction activities

- 2.1** Competent personnel are allocated tasks in accordance with the work sequence
- 2.2** Tasks are assessed as being in accordance with the predetermined sequence and appropriate for the work
- 2.3** Work procedures are monitored and evaluated as being appropriate and in accordance with rail network standards and procedures
- 2.4** Human and other resources are assessed as being adequate for the work

3 Deal with maintenance and construction problems

- 3.1** Causes and effects of system faults and failures in the worksite are diagnosed
- 3.2** Impact of work on structure integrity is assessed
- 3.3** Impact of work on track system integrity is assessed
- 3.4** Appropriate action is taken to ensure structure and track system integrity
- 3.5** Scope of work is modified to include related tasks and/or interfaces
- 3.6** Related faults and/or failures beyond the authorised

scope of work are reported

- 4 Complete documentation**
- 4.1** Required documentation procedures and processes are confirmed
 - 4.2** Documentation is filled in legibly and proofread
 - 4.3** Documentation is processed in accordance with workplace requirements

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 unit replaces and is equivalent to TLIS3029B Implement structures maintenance and installation of minor structures.

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 TLIS3029 Implement structures maintenance and installation of minor structures

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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 five separate occasions and include:

- applying relevant workplace procedures
- assessing impact of work on structure integrity and on track system integrity
- communicating effectively with others
- identifying job hazards and taking required actions to minimise, control or eliminate identified hazards
- implementing contingency plans
- implementing structure maintenance and installation of minor structures in accordance with rail network standards, safeworking system and workplace procedures
- implementing, monitoring and evaluating maintenance activities
- interpreting and following operational instructions and prioritising work
- modifying activities depending on operational contingencies, risk situations and environments
- monitoring, sequencing and implementing work activities in terms of planned schedule and appropriateness, in conformance with standards and procedures
- operating and adapting to differences in equipment in accordance with operating procedures
- reading and interpreting relevant instructions, procedures, information, technical data, standards and drawings
- reporting and rectifying within limits of own role, problems, faults and malfunctions, in accordance with workplace procedures
- selecting appropriate equipment
- selecting appropriate safe work method for implementing structures maintenance and installing minor structures
- working collaboratively with others
- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

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:

- documentation and record keeping requirements
- fundamentals of rail infrastructure relevant to implementing structures maintenance and installing minor structures
- hazards that may exist when undertaking structure maintenance and minor construction, and ways of controlling the risks involved
- problems that may occur when undertaking structure maintenance and minor construction, and action that can be taken to report or resolve these problems
- range of competencies required to carry out structure maintenance and construction
- range of structure maintenance and construction techniques and work processes
- relevant rail danger zones
- relevant rail network standards, specifications and codes of practice
- relevant rail safety, work health and safety (WHS)/occupational health and safety (OHS) and environmental procedures and regulations
- structure defects and action that can be taken to report or resolve them
- structure infrastructure and the interaction of all interfaces.

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 or, where this is not available, in simulated workplace operational situations that replicate rail corridor 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 access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation including workplace procedures, regulations, rail network standards, codes of practice and operation manuals
- exercises able to demonstrate competent performance in implementing five activities as listed below.

Competence must be assessed in two designated activities, plus one specified activity, plus two remaining activities:

- designated activities (2):

- installing transoms
- installing minor structures
- specified activities (any 1):
 - repairing concrete/masonry structures
 - repairing timber structures
 - repairing steel structures
- remaining activities (any 2):
 - maintaining bridge bearings
 - carrying out routine maintenance of structures
 - installing temporary track support
 - mixing and applying chemical repair products.

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