



Australian Government

TLIX0031X Provide maintenance engineering support in a defence integrated logistics environment

Release: 1

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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 undertake maintenance engineering support within a defence integrated logistics environment.

It includes determining the functional maintenance support requirements of an asset; designing and developing documentation required for physical maintenance support; the operating intent of the asset; and managing the maintenance support requirements of an asset throughout in-service and disposal.

Maintenance support provides the hardware, software, materiel, facilities, personnel, processes and data needed to enable maintenance services such that the materiel system (mission system and support system) retains its technical integrity throughout its intended life. Maintenance links closely with the other disciplines and is a driver of design change, technical data requirements, spares, training, the majority of technical publications content, configuration management (CM) requirements, and support system verification and validation activity.

This unit has extensive relationships to other integrated logistics support (ILS) functions, including ILS management, reliability availability and maintainability (RAM), technical publications, supply chain and training support.

This unit is appropriate for technical specialists supporting integrated logistics functions. Typically, these individuals will have existing vocational or higher education qualifications related to engineering, and significant engineering support experience. Prior training in, or awareness of, safety and human factors in engineering is useful for Maintenance Engineers in roles that will influence mission (asset) system design. They must demonstrate the ability to work independently or as part of a team under direct and/or indirect supervision, use discretion and judgement, and take responsibility for the quality of their outputs. All activities are carried out in accordance with relevant policies and procedures.

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

Pre-requisite Unit

Not applicable.

Competency Field

X – Logistics

Unit Sector

Integrated logistics

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Determine the maintenance support requirements of an asset

PERFORMANCE CRITERIA

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

- 1.1** ILS strategy for the program is reviewed to ensure relevance and alignment of maintenance engineering
- 1.2** Organisational support policy is accessed, interpreted and applied to maintenance support, logistics support analysis (LSA) strategy and ILS planning
- 1.3** Maintenance support performance metrics, requirements and specifications are developed in accordance with organisational policy
- 1.4** Data required to develop functional maintenance support requirements for the identified asset is gathered and analysed
- 1.5** Improvement, standardisation, technological and other risk mitigation opportunities are identified and analysed to inform asset and support system design changes
- 1.6** Maintenance requirements determination (MRD) is conducted to identify physical maintenance support requirements
- 1.7** Usage upkeep cycle and class maintenance plan is developed to sustain the asset over life
- 1.8** Maintenance management system requirements are identified

2 Design and develop physical maintenance requirements to support

- 2.1** Maintenance task analysis is conducted to determine the physical elements associated with each preventative and

the operating intent of the asset

corrective maintenance task

- 2.2 Maintenance records are developed, loaded and data maintained within the materiel maintenance management information system
- 2.3 Technical data is developed and/or validated
- 2.4 Verification and validation activities and maintenance support assessments are planned and conducted to confirm the achievement of maintenance support objectives

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 is a new unit. No equivalent unit.

Links

Companion Volume Implementation Guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>