



Australian Government

**Assessment Requirements for TLIX0031X
Provide maintenance engineering support
in a defence integrated logistics
environment**

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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.

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 two separate occasions and include:

- reviewing integrated logistics support (ILS) strategy for the program to ensure relevance and alignment of maintenance engineering
- accessing and interpreting the organisational support policy and applying it to maintenance support, logistics support analysis (LSA) strategy and ILS planning
- working as part of the ILS team, planning and conducting maintenance engineering tasks, including:
 - during the concepts, requirements determination and design phases of a materiel system
 - during the design and development phases of a support system
 - throughout the in-service and disposal phases of a materiel system
- determining the functional maintenance support requirements of an asset
- designing, developing and delivering the physical maintenance support outputs that enable maintenance services to ensure the materiel system retains its technical integrity throughout its intended life.

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:

- organisational policies and procedures relevant to ILS
- organisational policies and strategies relevant to maintenance engineering
- industry standards relevant to ILS and maintenance engineering
- LSA processes and the application of LSA data, including failure mode, effects and criticality analysis (FMECA), level of repair analysis (LORA), reliability, availability and maintainability (RAM) and reliability-centred maintenance (RCM)
- techniques to develop understanding of the proposed system
- techniques to develop functional maintenance support requirements and translating these into physical support outputs and ILS outcomes
- techniques to identify improvements, standardisation, technological and other risk mitigation

opportunities to inform asset and support system design changes to improve support system outcomes or reduce life cycle costs

- physical elements associated with each maintenance task, including:
 - skills, knowledge and attributes – trade performance requirements
 - maintenance procedures and processes (safety issues, hazards and associated human factors considerations)
 - general and specialist tools and test equipment
 - facility requirements (at each level of repair)
 - repair parts, rotatable items and consumables
 - packaging, handling, storage and transportation (PHS&T) requirements for all items of supply
 - conducting an economic LORA and amending support strategy and plans
 - populating the logistics support analysis record (LSAR)
- processes and information required to prepare outline plans and high-level costings
- maintenance engineering concepts and practices
- organisational maintenance management systems
- maintenance engineering budget forecast
- techniques to plan engineering maintenance related to human resource complements
- techniques to plan and conduct verification and validation activities and maintenance support assessments to confirm the achievement of maintenance support objectives, including:
 - acceptance test and verification plans and reports
 - maintenance evaluations
 - operational test and evaluation support.

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 workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate 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
- applicable documentation, including organisational policies and procedures, legislation, data and/or modelling applicable to ILS, industry standards and/or specifications and access to relevant organisational information management systems

- relevant materials, tools, equipment and personal protective equipment (PPE) currently used in industry.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=df441c6e-213d-43e3-874c-0b3f7036d851>