



Australian Government

DEFTE002A Prepare testing and evaluation processes

Release 2

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Modification History

Release	TP version	Comments
2	DEF12 V2	Layout adjusted.
1	DEF12 V1	First release.

Unit Descriptor

This unit covers the competency required to prepare for a test and evaluation process. It includes the requirement to establish the testing process, to integrate the testing processes and to develop, review and maintain the test plan.

Application of the Unit

This unit was developed for Defence test and evaluation workers but is applicable to individuals who work in this field.

Typically these individuals must work independently or as part of a team under direct and indirect supervision, use discretion and judgement, and take responsibility for the quality of their output. All activities are carried out in accordance with relevant organisational policy and procedures.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Establish test and evaluation processes	1.1 Drivers for the test and evaluation are confirmed with stakeholders 1.2 Test plan is developed in accordance with direction from Test and Evaluation Master Plan and/or organisational documents and procedures 1.3 Test methods are determined by consideration of resource constraints, environmental constraints, evidence requirements, existing capabilities and their compatibility with existing procedures 1.4 Stakeholders are briefed in accordance with organisational policy and procedures, to negotiate endorsement for testing process 1.5 Agreements with stakeholders and resources are obtained in accordance with organisational procedures 1.6 Scope and objectives are reviewed and analysed, and a strategy is developed to establish work breakdown structures to implement testing process 1.7 Testing infrastructure is identified and established in accordance with organisational policy and procedures 1.8 Safety systems and procedures are identified and established in accordance with organisational policy and procedures, and test plan 1.9 Specialist and technical support relevant to the testing is identified and obtained in accordance with test plan 1.10 Security and confidentiality of data is maintained in accordance with workplace and regulatory requirements 1.11 Governance structure and processes are established as detailed in test plan
2. Conduct start-up activities	2.1 Test plans are refined in consultation with steering committee and team members, and precise details are included for schedules of activities, milestones and resources 2.2 Required systems are established and maintained throughout the process in accordance with the complexity of the testing and in line with test plan 2.3 Testing and evaluation team members' understanding of and commitment to, fulfilling the requirements,

ELEMENT**PERFORMANCE CRITERIA**

- and their roles and responsibilities for the duration of the process are confirmed
- 2.4 **Management tools** are utilised and applied effectively to achieve outcomes
3. **Manage test and evaluation preparedness**
- 3.1 All aspects of testing and related processes are integrated, and links are established to ensure objectives are met in accordance with test plan
- 3.2 Consultation and reporting mechanisms are established in accordance with test plan, and staff and contractors are regularly consulted to discuss progress and to ensure effective results
- 3.3 Integration is monitored, and management plans and any related contracts are reviewed and amended as appropriate, with results reported in accordance with mechanisms identified in test plan
- 3.4 Ongoing progress monitoring processes are established against agreed milestones in accordance with test plan, to provide a measure of performance throughout the life of the testing process
- 3.5 Programmed review of objectives and achievement is planned and established in accordance with test plan

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit.

Required Skills

- access/prepare information electronically or in hard copy
- apply risk management techniques
- communicate with stakeholders using a range of communication styles to suit different audiences and purposes
- conduct research
- detail requirements, write recommendations and implement plans requiring precision of expression
- include workplace safety issues in implementing requirements
- negotiate timelines, roles and responsibilities with stakeholders and team members
- schedule testing activities
- use management techniques related to testing and evaluation that may be reasonably complex in terms of scope; degree of risk; environmental, political, cultural and social factors that apply; consequences of failure; degree of control
- use management tools suited to implementing testing processes
- use public relations strategies to promote and gain endorsement

Required Knowledge

- approval processes
- change management
- cost schedule control systems
- integrated logistics support
- legislation, organisational policy and procedures that may impact on the test and evaluation process
- management tools suited to planning testing and evaluation processes
- principles relating to the planning phase of testing and evaluation processes
- resource plans
- scheduling packages
- test and evaluation planning methods which may be reasonably complex in terms of scope; degree of risk; environmental, political, cultural and social factors that apply; consequences of failure; degree of control
- work breakdown structure (WBS)

Evidence Guide

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Nil

Consistency in performance

Competency should be demonstrated over time and should be observed in a range of actual or simulated work contexts.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed in the workplace or in a simulated workplace environment.

Specific resources for assessment

Access is required to:

- legislation, guidelines, procedures and protocols relating to planning and management
- computer and relevant software
- workplace documentation.

Guidance information for assessment

In all cases, assessment should be supported by questions to assess required knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

Assessment methods should reflect workplace demands such as literacy and the needs of particular groups.

Assessment methods suitable for valid and reliable assessment of this unit may include, but are not limited to, a combination of:

- authenticated evidence from the workplace and/or training programs
- case studies
- demonstration
- feedback from supervisors and peers regarding the candidate's ability
- observation
- portfolios
- projects
- questioning
- reviews or reports prepared by the candidate
- scenarios
- simulation or role plays.

Range Statement

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below.

<i>Stakeholders</i> may include:	• Clients or customers (internal and external) • End user/s • Functional areas • General public • Industry • Organisation's senior management • Other agencies • Other test facilities • Project teams • Relevant interest groups • Sponsor/funding bodies • Steering committee members • Supplier/service • Unions
<i>Organisations</i> may include:	• Defence • Defence contractors and sub-contractors • Defence Materiel Organisation • Defence Science and Technology Organisation • International test agencies • Universities
<i>Policy and procedures</i> may include:	• Relevant commonwealth, state/territory and local legislation affecting organisation's administration such as: • financial management, and accounting legislation and regulations • occupational health and safety legislation • public sector management acts • Government and organisational policy, guidelines and procedures relating to: • delegation approvals • industrial agreements • procurement guidelines • resourcing • risk management • security • strategic or operational plans

	• technical and regulatory framework • testing and evaluation • training
Agreements may include:	• Contract • Memorandum of understanding • SLA • TORs
Work breakdown structures may include:	• How the testing is to be performed, and how cost and schedule data are to be tracked and reported • Identification of specific management responsibilities for tasks • Identification of testing tasks
Infrastructure may include:	• Aspects such as: • accommodation • equipment and technical support • instrumentation • management infrastructure • need for recruitment action and training • resource requirements including travel, finance etc. • staffing levels • and may also include: • calibration • effective test readiness reviews • inspections • testing
Test plans may include:	• Acquisition strategies • Budget and financial management strategy • Contract management • Cost estimates • Evaluation criteria • Expected/measurable outcomes • Facilities • Functional performance specifications • Governance strategy • Implementation strategy • Inclusions and exclusions • Information/communication strategy • Intellectual property strategies • Milestones • Objectives

	• Occupational concept document • People plan including human resource management and human resource development • Performance criteria/indicators • Purpose • Quality assurance • Quality control • Quality standards • Rationale • Required resources • Resource management • Risk management • Roles and responsibilities • Safety criteria • Schedule/timeline • Specific equipment, instrumentation, and/or specialised facilities and required conditions • Task/WBS • Test and evaluation master plan (TEMP) criteria • Test concept document • Testing control mechanisms • Testing deliverables and their acceptance criteria
Specialists may include:	• Environmental • Financial • Legal • Logistics • Operators • Other functional areas • Other relevant agencies • Regulatory • Safety • Technical

Required systems may include:	• Data collection systems • Financial management • Planning and monitoring system • Recordkeeping for documented information such as: • contracts • correspondence • outcomes • performance reports against milestones • progress reports • quality data including test results, survey, needs • samples, prototypes, models • time allocated and spent
Management tools may include:	• Communications plan • Life cycle cost analysis • Logistics support analysis • Organisational testing governance framework • Recording systems - electronic and manual • Reporting framework • Risk analysis • Test and evaluation management software and other tools: • cost schedule control system • critical path method • Gantt and bar charts • program evaluation and review technique (PERT) charts • spreadsheets

Unit Sector(s)

Not applicable.