



Australian Government

DEFTE004A Evaluate testing

Release 2

DEFTE004A Evaluate testing

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 evaluate the results of a testing process. It involves analysing data and solving complex problems where the information may not be obvious but can be determined by direct and logical reasoning.

This unit does not require the detailed analysis of complex mathematical and scientific data; if this is required then DEFTE006A Analyse test data, should be accessed.

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. Assemble testing evidence	1.1 <i>Testing evidence</i> is identified in accordance with <i>organisational policy and procedures</i> , and <i>test plan</i> 1.2 <i>Evaluation criteria</i> is determined in accordance with organisational policy and procedures, and test plan 1.3 Testing evidence is accessed in accordance with organisational policy and procedures, and test plan 1.4 Data relevance and accuracy is verified in accordance with organisational policy and procedures, and test plan 1.5 Data errors are <i>rectified</i> in accordance with organisational policy and procedures, and test plan
2. Evaluate testing evidence	2.1 Evidence is assessed against estimations and expectations in accordance with evaluation criteria 2.2 Trends in evidence are identified and the significance is detailed 2.3 Data comparisons are conducted to determine the validity of outcomes in accordance with evaluation criteria 2.4 <i>Management tools</i> are utilised in accordance with organisational procedures 2.5 <i>Test outcomes are determined</i> in conjunction with <i>stakeholders</i>
3. Record and report testing outcomes	3.1 Test outcomes and reasons for them are recorded in accordance with organisational policy and procedures, and test plan 3.2 Security and confidentiality of data is maintained in accordance with workplace and regulatory requirements 3.3 Results are reported in accordance with organisational policy and procedures, and test plan 3.4 <i>Records are maintained</i> in accordance with organisational policy and procedures, and 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
- analyse and evaluate test evidence
- apply risk management techniques
- communicate with stakeholders using a range of communication styles to suit different audiences and purposes
- detail requirements, write recommendations and monitoring plans requiring precision of expression
- determine test outcomes
- use management techniques related to testing 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 the conduct of testing processes

Required Knowledge

- legislation, organisational policies and procedures that may impact on the test and evaluation process
- management tools suited to the conduct of testing processes
- principles relating to the evaluation of testing processes
- test and evaluation processes 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

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 testing and evaluation
- testing evidence
- workplace documentation.

Guidance information for assessment

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

<p>The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. <i>Bold italicised</i> wording in the Performance Criteria is detailed below.</p>	
<p><i>Testing evidence</i> may include:</p>	<ul style="list-style-type: none"> • Analogue logs • Audiovisual results • Digital logs • Electronic logs • Observations • Physical components/evidence • Qualitative statements • Statistical results
<p><i>Organisations</i> may include:</p>	<ul style="list-style-type: none"> • Defence • Defence contractors and sub-contractors • Defence Materiel Organisation • Defence Science and Technology Organisation • International test agencies • Universities
<p><i>Policy and procedures</i> may include:</p>	<ul style="list-style-type: none"> • Relevant commonwealth, state/territory and local legislation affecting organisation's administration such as: <ul style="list-style-type: none"> • financial management and accounting legislation and regulations • work health and safety legislation • public sector management acts • Government and organisational guidelines and procedures relating to: <ul style="list-style-type: none"> • delegation approvals • industrial agreements • procurement guidelines • resourcing • risk management • security • strategic or operational plans • technical and regulatory framework • testing and evaluation • training
<p><i>Test plans</i> may include:</p>	<ul style="list-style-type: none"> • Acquisition strategies • Budget and financial management strategy • Contract management

	<ul style="list-style-type: none"> • 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/work breakdown structure (WBS) • Test and evaluation master plan (TEMP) criteria • Test concept document • Testing control mechanisms • Testing deliverables and their acceptance criteria
<i>Evaluation criteria</i> may include:	<ul style="list-style-type: none"> • Detailed requirements determined in the planning phase of the test process • Go or no-go requirements • Pass fail statements
<i>Rectification</i> may include:	<ul style="list-style-type: none"> • Liaison with subject matter experts • Requirement for further analysis of test data
<i>Management tools</i> may	<ul style="list-style-type: none"> • Communications plan • Life cycle cost analysis

include:	<ul style="list-style-type: none"> • Logistics support analysis • Organisational testing governance framework • Recording systems - electronic and manual • Reporting framework • Risk analysis • Test and evaluation management software and other tools: <ul style="list-style-type: none"> • cost schedule control system • critical path method • Gantt and bar charts • program evaluation and review technique (PERT) charts • spreadsheets
<i>Determining test outcomes</i> may include:	<ul style="list-style-type: none"> • Cancellation of further testing • Changes to test and evaluation plans • Further testing • Success or failure of the test
<i>Stakeholders</i> may include:	<ul style="list-style-type: none"> • 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>Maintenance of records</i> may include:	<ul style="list-style-type: none"> • Security requirements • Electronic storage

Unit Sector(s)

Not applicable.