



Australian Government

Department of Education, Employment and Workplace Relations

PUADEFTE004A Evaluate testing

Revision Number: 1

PUADEFTE004A Evaluate testing

Modification History

Not applicable.

Unit Descriptor

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 PUADEFTE006A Analyse test data, should be accessed.

Application of the Unit

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

Employability Skills This unit contains employability skills.

Pre-requisite Unit/s Nil

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 Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT

1. Assemble testing evidence

PERFORMANCE CRITERIA

- 1.1 ***Testing evidence*** is identified in accordance with ***organisational policy and procedures***, and ***test plan***
- 1.2 ***Evaluation criteria*** 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 ***rectified*** in accordance with organisational policy and procedures, and test plan

ELEMENT**PERFORMANCE CRITERIA****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 **Management tools** are utilised in accordance with organisational procedures
- 2.5 **Test outcomes are determined** in conjunction with **stakeholders**

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 **Records are maintained** in accordance with organisational policy and procedures, and test plan

Required Skills and Knowledge

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

EVIDENCE GUIDE

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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

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.

Testing evidence may include

Analogue logs
Audiovisual results
Digital logs
Electronic logs
Observations
Physical components/evidence
Qualitative statements
Statistical results

Organisations may include

Defence
Defence contractors and sub-contractors
Defence Materiel Organisation
Defence Science and Technology Organisation
International test agencies
Universities

Policy and procedures 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 guidelines and procedures relating to:

- delegation approvals
- industrial agreements
- procurement guidelines
- resourcing
- risk management
- security
- strategic or operational plans
- technical and regulatory framework

RANGE STATEMENT**Test plans may include**

- testing and evaluation
 - training
- 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

RANGE STATEMENT

	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
Evaluation criteria may include	Detailed requirements determined in the planning phase of the test process Go or no-go requirements Pass fail statements
Rectification may include	Liaison with subject matter experts Requirement for further analysis of test data
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
Determining test outcomes may include	Cancellation of further testing Changes to test and evaluation plans Further testing Success or failure of the test
Stakeholders may include	Clients or customers (internal and external) End user/s

RANGE STATEMENT

	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
Maintenance of records may include	Security requirements
	Electronic storage

Unit Sector(s)

Not applicable.

Corequisite Unit/s

Co-requisite Unit/s	Nil
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