



Australian Government

DEFSIM020 Conduct simulator performance evaluation

Release: 1

DEFSIM020 Conduct simulator performance evaluation

Modification History

Release 1. This is the first release of this unit of competency in the DEF Defence Training Package Release 4.0.

Application

This unit describes the knowledge and skills required to evaluate the operational performance of components and/or elements of a simulator. This includes identifying the performance evaluation requirement, conducting the operational performance evaluation, analysing the results, and the documentation and certification processes. In the context of this unit, simulators are used to replicate land, air, sea and undersea systems to facilitate training and development.

The simulator components include the complete simulator, power and control systems, computers and peripheral hardware, image generator and visual display systems, motion and control systems, sound systems and weapons systems.

The simulator elements include subjective tests and credit sequences which affect the operational performance of the simulator.

The outcomes of the performance evaluation include immediate fault finding and repair, scheduling the simulator for routine maintenance or calibration of simulator systems.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would work independently, or as part of a team, with minimal supervision, while performing complex tasks, including complex problem solving, in a limited range of contexts. They would use discretion and judgement and take responsibility for the quality of their outputs.

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

Pre-requisite Unit

Not applicable.

Competency Field

Simulator Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Identify evaluation requirement	1.1	Identify the type of simulator evaluation to be undertaken
	1.2	Identify the components and/or elements to be evaluated
	1.3	Identify evaluation parameters to be met
2 Undertake performance evaluation	2.1	Prepare simulator for performance evaluation
	2.2	Conduct performance evaluation
	2.3	Collect and collate evaluation data
3 Analyse performance results	3.1	Conduct analysis of performance data
	3.2	Identify performance abnormalities
	3.3	Identify cause of performance variations
	3.4	Determine remedial action if necessary
4 Finalise performance evaluation process	4.1	Report abnormalities as required
	4.2	Complete documentation for future application according to organisational standards

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.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to DEFSIM007 Conduct simulator performance evaluation

Links

Companion Volume Implementation Guides are found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6bdbab1e-11ed-4bc9-9cba-9e1a55d4e4a9>

Assessment Requirements for DEFSIM020 Conduct simulator performance evaluation

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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 one occasion and includes:

- undertaking research and analysis related to simulator operational performance
- following logical analysis techniques
- using measuring instruments
- following configuration management processes
- using appropriate information technology and software including proprietary sound analysis software and proprietary simulator performance test systems
- identifying, reviewing and analysing information that may impact on the simulator operational performance
- identifying simulator performance abnormalities
- determining simulator operational performance remedial action
- negotiating and communicating effectively with key stakeholders.

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:

- operational capabilities and limitations of the relevant simulator
- simulator operating modules comprising the simulator system being worked on
- subjective tests and credit sequences which affect the operational performance of the simulator
- calibration methodologies related to the simulator being evaluated
- legislative and regulatory requirements related to the simulator being evaluated
- organisational policy and procedures related to the relevant simulator
- configuration management related to the simulator being evaluated
- product knowledge related to systems and/or equipment in service.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training

Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect 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.

Retail or commercial systems whose primary purpose is entertainment do not meet the requirements.

Individual domestic use systems whose primary purpose is entertainment do not meet the requirements.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- acceptable means of simulation assessment
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and PPE currently used in industry.

Links

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