



**Australian Government**

# **DEFSIM007 Conduct simulator performance evaluation**

**Release: 1**

# DEFSIM007 Conduct simulator performance evaluation

## Modification History

| Release | Comments                                                                                                                              |
|---------|---------------------------------------------------------------------------------------------------------------------------------------|
| 1       | These Assessment Requirements were released in DEF Defence Training Package release 1.0 and meet the Standards for Training Packages. |

## 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 distribution and control systems, computers and peripheral hardware, image generator and visual display systems, motion and control loading 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.

This unit was developed in a Defence environment but may be relevant to others who work in this field.

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.

## Competency Field

Simulator Operations

## Elements and Performance Criteria

| ELEMENTS                                          | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                          |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Elements describe the essential outcomes          | Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.                                                                       |
| <b>1. Identify evaluation requirement</b>         | 1.1 Identify the type of simulator evaluation to be undertaken.<br>1.2 Identify the components and/or elements to be evaluated.<br>1.3 Consult simulator documentation.<br>1.4 Identify evaluation parameters to be met.<br>1.5 Prepare simulator for performance evaluation. |
| <b>2. Undertake performance evaluation</b>        | 2.1 Conduct performance evaluation.<br>2.2 Collect and collate evaluation data.                                                                                                                                                                                               |
| <b>3. Analyse performance results</b>             | 3.1 Conduct analysis of performance data.<br>3.2 Identify performance abnormalities.<br>3.4 Identify cause of performance variations.<br>3.5 Determine remedial action if necessary.                                                                                          |
| <b>4. Finalise performance evaluation process</b> | 4.1 Complete certification and other documentation for future application.<br>4.2 Report abnormalities as required.                                                                                                                                                           |

## Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

|                     |   |   |   |   |         |   |   |   |   |         |   |   |   |   |                    |   |   |   |   |          |   |   |   |   |
|---------------------|---|---|---|---|---------|---|---|---|---|---------|---|---|---|---|--------------------|---|---|---|---|----------|---|---|---|---|
| 1                   | 2 | 3 | 4 | 5 | 1       | 2 | 3 | 4 | 5 | 1       | 2 | 3 | 4 | 5 | 1                  | 2 | 3 | 4 | 5 | 1        | 2 | 3 | 4 | 5 |
| Learning <b>N/A</b> |   |   |   |   | Reading |   |   |   |   | Writing |   |   |   |   | Oral communication |   |   |   |   | Numeracy |   |   |   |   |

Performance variables

|         |   |   |   |   |         |   |   |   |   |                 |   |   |   |   |                 |   |   |   |   |
|---------|---|---|---|---|---------|---|---|---|---|-----------------|---|---|---|---|-----------------|---|---|---|---|
| 1       | 2 | 3 | 4 | 5 | 1       | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 | 1               | 2 | 3 | 4 | 5 |
| Support |   |   |   |   | Context |   |   |   |   | Text complexity |   |   |   |   | Task complexity |   |   |   |   |

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

## Unit Mapping Information

No equivalent unit.

## Links

Companion Volume implementation guides are found in VETNet -

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

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# Assessment Requirements for DEFSIM007 Conduct simulator performance evaluation

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## Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- undertaking research and analysis related to simulator operational performance
- following logical, complex analysis techniques
- using measuring instruments including thermal array recorders, sound analysers, light and chroma meters and acoustic calibrators
- following configuration management processes
- using tools including signal generators
- using appropriate information technology and software including at least one of proprietary simulator management databases, proprietary motion control loading system calibration software, 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 must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- 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

Competency should be assessed in an actual workplace or in a simulated environment, with access to equipment and infrastructure appropriate to the outcome. Competency should be demonstrated over time to ensure the candidate is assessed across a variety of situations.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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