



Australian Government

DEFGEO002 Apply geospatial visualisation

Release: 1

DEFGEO002 Apply geospatial visualisation

Modification History

Release 1. This is the first release of this unit of competence from the Defence DEF Training Package

Application

This unit describes the knowledge and skills required to provide geospatial visualisation products to Defence clients. It covers such tasks as the production of maps and charts, and specialised product such as contour maps, slope maps, shaded relief products and three dimensional flythrough.

The outcomes require the application of geospatial software, such as geographic information system (GIS) functionality. In the context of this unit, a general understanding of the operational or training environment is required.

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

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.

Licensing/Regulatory Information

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

Pre-requisite Unit

Not applicable

Competency Field

Geospatial

Unit Sector

Defence

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

1 Plan and prepare to provide geospatial visualisation products	1.1	Tasking for geospatial work requirements are received and where required, clarified in accordance with standard operational procedures (SOPs)
	1.2	Operational geospatial environment is identified and equipment relevant to geospatial operations is selected in accordance with SOPs
	1.3	All resources required to perform the geospatial functions are identified and accessed in accordance with SOPs
2 Compile geospatial data	2.1	Data is processed and analysed to prepare product content in accordance with SOPs
	2.2	Data is checked for accuracy in accordance with SOPs
3 Produce geospatial product	3.1	Product information and content are prepared and produced in required format and content in accordance with SOPs
	3.2	Product content and format are checked against task and remediated as required in accordance with SOPs
	3.3	Product is distributed to identified client in accordance with SOPs
4 Finalise geospatial task	4.1	All documentation and reports are completed and alerted to the relevant supervisory personnel in accordance with SOPs
	4.2	All geospatial equipment utilised during tasks are refurbished in accordance with manufacturer requirements and SOPs

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

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>

Assessment Requirements for DEFGEO002 Apply geospatial visualisation

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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:

- communicating clearly with others to clarify work tasks and equipment selection
- following manufacturer specifications and standard operating procedures to correctly:
 - set up and operate
- pack up and store equipment identifying, reviewing and analysing data and other information that may impact on the tasks
- producing relevant maps and charts, and specialised product including:
 - contour maps
 - slope maps
 - shaded relief products
 - three dimensional flythrough
- selecting and using the appropriate geospatial resources and equipment to provide geospatial visualisation products
- using information technology and software appropriate to geospatial visualisation operations
- using approved procedures to accurately apply measurements and data
- completing report and documentation for geospatial task

Knowledge Evidence

Evidence required to demonstrate competence, must satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- common geospatial terms used in geospatial operations
- common types of geospatial products used for Defence operations and training
- operational capabilities and limitations of the geospatial equipment, including computing equipment and software being used
- legislative and regulatory requirements related to the geospatial products
- organisational policy relevant to providing geospatial products
- standard operating procedures (SOPs) for geospatial equipment and resources

- reporting requirements for providing geospatial products
- legislative obligations of Work Health and Safety (WHS)/Occupational Health and Safety (OHS)/Occupational Safety and Health (OSH) requirements and safe work / workplace procedures
- standards and practices for measuring and recording spatial data
- the environment in which the geospatial products will be applied
- typical referencing systems used on different types of geospatial products including:
 - contour maps
 - slope maps
 - shaded relief products
 - three dimensional flythrough

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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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.

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

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry

Links

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