



Australian Government

CPPSIS3021 Visually interpret image data

Release: 1

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Modification History

Release 1.

New unit of competency.

This version first released with CPP Property Services Training Package Version 3.

Application

This unit of competency specifies the outcomes required to visually interpret image data to identify the basic features of the landscape, including land cover such as vegetation, roads, railways, buildings, water bodies and terrain forms. Image data can include aerial and terrestrial photographs and satellite images. The images can be digital or in hard copy. Mapping or other appropriate software can be used to assist visual interpretation if it is available. The unit requires the ability to apply the principles and methods of visual image interpretation. This unit is restricted to visual interpretation, as digital enhancement of images is covered in CPPSIS4026 Digitally enhance and process image data.

The unit supports those who work under direct supervision in a surveying and spatial information services team, in positions that support mapping, geographic information systems (GIS) and town planning.

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

Pre-requisite Unit

Nil

Unit Sector

Surveying and spatial information services

Elements and 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.
1. Identify image and ancillary data.	1.1. Task requirements are clarified with <i>appropriate persons</i> . 1.2. Possible sources of image data are identified to meet task requirements.

- 1.3. Constraints in using different types of image data are clarified in discussion with appropriate persons.
 - 1.4. Ancillary data that can be used to assist visual interpretation of image is identified and obtained.
2. Identify and record basic landscape features.
 - 2.1. Image data is visually interpreted using interpretation principles and ancillary data, and features are identified and recorded according to task and organisational requirements.
 - 2.2. Interpreted results are discussed and confirmed with appropriate persons.
 - 2.3. Ground control targets for photogrammetric mapping are checked to enhance understanding of image data.
 - 2.4. Scale is determined according to organisational requirements.
 - 2.5. Data is stored and documents are completed according to organisational requirements.

Foundation Skills

This section describes the language, literacy, numeracy and employment skills essential to performance in this unit but not explicit in the performance criteria.

Skill	Performance feature
Numeracy skills to:	• measure and calculate scale objects from an image and ancillary data.
Oral communication skills to:	• ask questions to clarify work tasks.
Reading skills to:	• interpret graphical information, including shapes and patterns within aerial and terrestrial photographs and satellite images.
Writing skills to:	• record details of image features using standard proformas.

Technology skills to:

- use simple analogue and digital tools to assist with visual interpretation.

Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

Appropriate persons must include at least one of the following:

- experienced colleague
- supervisor or line manager.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPSIS3021 Visually interpret image data

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Performance Evidence

A person demonstrating competency in this unit must satisfy the requirements of the elements, performance criteria, foundation skills and range of conditions of this unit. The person must also visually identify three instances of the following from both an aerial or terrestrial photograph or image, and a satellite image:

- buildings
- rail lines
- roads
- terrain types
- vegetation
- water bodies.

Where images from ground penetrating radar (GPR) are required to be interpreted, the person must visually identify three of the basic landscape features listed above from:

- a GPR image display, and
- one of the following:
 - aerial photograph or image
 - satellite image.

While visually interpreting the above image data, the person must:

- assess task requirements to clarify types of image data to be accessed and interpreted
- communicate clearly with others to clarify and discuss work tasks
- identify possible sources of image and ancillary data to meet task requirements
- apply the principles and methods of visual image interpretation
- apply ground controls to aerial photographs
- calculate scale from image data
- comply with organisational requirements relating to:
 - accessing and formatting image data
 - data privacy and information copyright
 - health and safety

- conduct basic measurements relating to image data to identify scale
- identify and report constraints and problems with image data
- use organisational proformas to accurately record measurements and data.

Knowledge Evidence

A person demonstrating competency in this unit must demonstrate knowledge of:

- basic formulas used to calculate scale relating to data images
- basic landscape features that can be identified from image data
- organisational policies and procedures relating to:
 - accessing and formatting image data
 - data privacy and information copyright
 - health and safety
- possible sources of image and ancillary data
- principles and methods of visual image interpretation
- types of image data used in spatial applications.

Assessment Conditions

The following must be present and available to learners during assessment activities:

- specifications:
 - standard operating procedures and documentation relating to data privacy and information copyright
 - suitable image data in hard copy or digital format
- relationships with team members and supervisor:
 - working under supervision.

Timeframe:

- as specified by task and organisational requirements.

Assessor requirements

As a minimum, assessors must satisfy the assessor requirements in the Standards for Registered Training Organisations (RTOs) current at the time of assessment.

Links

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