



**Australian Government**

# **CPPSIS5035 Obtain and validate spatial data**

**Release: 1**

# CPPSIS5035 Obtain and validate spatial data

## Modification History

Release 1.

Replaces superseded equivalent CPPSIS5035A Obtain and validate spatial data.

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

## Application

This unit of competency specifies the outcomes required to obtain and validate spatial data to meet client specifications. The unit covers analysing project requirements and agreements and determining appropriate data acquisition options. It also covers applying industry-accepted validation methodologies to assess the validity and integrity of data and resolve problems. The unit requires the ability to use technology to access, manipulate, archive and retrieve a range of spatial data. It also requires the ability to record metadata and complete documentation and written communications.

The unit supports those who work in a lead role in a surveying or spatial information services team in areas such as surveying, cartography, town planning, mapping or geographic information systems (GIS).

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. Prepare for spatial data acquisition. | 1.1. Project specifications, client instructions and agreements are determined and analysed according to organisational requirements. |
|                                          | 1.2. Data requirements are confirmed with <b><i>appropriate persons</i></b> and resources are allocated to project tasks              |

according to organisational requirements.

- 1.3. Protocols for communicating with spatial data providers are followed according to organisational requirements.
- 1.4. Viability of provider's service agreement is assessed based on advice from appropriate persons.
- 1.5. Data acquisition options are determined according to project specifications and organisational requirements.
- 1.6. Data is received and processed according to project specifications and organisational requirements.

2. Validate spatial data.
  - 2.1. Data is assessed for validity and integrity according to project specifications.
  - 2.2. Omissions and gaps in spatial data are identified and resolved in consultation with appropriate persons.
  - 2.3. **Metadata** is recorded according to organisational requirements.
  - 2.4. Documentation is completed and stored 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                                                                                               |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Planning and organising skills to: | <ul style="list-style-type: none"><li>• delegate project tasks to staff.</li></ul>                                |
| Numeracy skills to:                | <ul style="list-style-type: none"><li>• interpret and analyse statistics.</li></ul>                               |
| Oral communication skills to:      | <ul style="list-style-type: none"><li>• negotiate data requirements with clients and service providers.</li></ul> |

- Reading skills to:
- interpret contractual obligations detailed in legal documents, such as contracts, agreements, memorandums of understanding, and licences
  - analyse detailed technical descriptions of spatial data and their qualifiers.
- Writing skills to:
- communicate with clients and data providers using email
  - record measurements with accuracy and precision.
- Technology skills to:
- use a computer and software to access, manipulate, archive and retrieve a range of spatial data.
- Problem-solving skills to:
- apply contingency measures to resolve identified errors
  - verify authenticity of data against specifications.

## 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 two of the following:
- client
  - end user
  - financial or legal specialist
  - manager
  - qualified surveyor
  - spatial data provider
  - supplier
  - town planner.

- Metadata*** must include at least three of the following:
- availability
  - conditions of use
  - coordinate system
  - currency
  - custodian
  - data accuracy

- data description
- date of acquisition
- licence
- quality
- source
- spatial data acquisition methodologies
- version control.

## Unit Mapping Information

CPPSIS5035A Obtain and validate spatial data

## 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 CPPSIS5035 Obtain and validate spatial data

## Modification History

Release 1.

Replaces superseded equivalent CPPSIS5035A Obtain and validate spatial data.

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

## 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 obtain and validate spatial data that meets client specifications for two different projects.

While obtaining and validating the above spatial data, the person must:

- apply contingency measures when solving problems relating to data
- comply with organisational requirements and manufacturer specifications when using the equipment specified in the assessment conditions
- comply with organisational requirements for:
  - allocating resources, delegating duties and working within budgetary constraints
  - communicating with clients and spatial data providers
  - recording metadata and completing documentation
  - working safely when using screen-based equipment
- comply with legal requirements relating to client service provision, and accessing and managing spatial data
- exercise precision when archiving, retrieving, managing and manipulating spatial data
- use industry-accepted methods for assessing the validity and integrity of spatial data and resolving errors.

## Knowledge Evidence

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

- industry-accepted standards relating to obtaining and validating spatial data
- legal requirements for accessing, storing, retrieving and archiving digital and hard copy spatial data, including data privacy and information copyright
- methods for assessing and validating spatial datasets and dataset sources
- organisational requirements relating to:
  - work health and safety
  - client services
  - human resource management

- completing documentation
- spatial data capture methodologies
- spatial data formats and structures
- key features of spatial reference systems.

## Assessment Conditions

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

- equipment:
  - computer with software appropriate for spatial data management and electronic communication
  - printer
- specifications:
  - organisational policies and procedures relating to:
    - work health and safety
    - data privacy and information copyright
    - project budget and resources
- physical conditions:
  - access to equipped work station
- relationships with team members and supervisor:
  - working in a team.

Timeframe:

- as specified by client and project 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

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>