

**ODraft 0.2**

This is a draft update to CPPSIS5035 Obtain and validate spatial data:

<https://training.gov.au/Training/Details/CPPSIS5035>

New title: Create spatial data.

Changed PCs to active voice.

Unit has been reworked based on feedback from NSW.

Modified Elements 1 and 2  
and new PCs.

Additional

PCs added to element 2.

Changed 'person' to 'candidate' in PE.

## Unit of Competency

### CPPSI5035 Create spatial data

#### Modification history

Release	Comments
1	<del>Replaces superseded equivalent CPPSI5035A Obtain and validate spatial data. This version first released with CPP Property Services Training Package Version 3.</del>

#### Application

This unit specifies the skills and knowledge required to validate spatial data and create a metadata statement. It covers evaluating project requirements and determining appropriate quality checks for the data. It includes applying industry-accepted validation methodologies to assess the validity and integrity of data and resolve problems.

This unit is suitable for skilled surveying technicians and skilled spatial information system (SIS) technicians who use a broad range of cognitive, technical and communication skills to select and apply methods and technologies to analyse information and provide solutions to sometimes complex surveying/spatial information problems. Surveying and spatial information skills are applied in a range of industry contexts including town planning, civil construction, mining, engineering, health, agriculture and defence.

All work must be carried out to comply with workplace procedures, in accordance with relevant State/Territory regulations that govern surveying work as well as work health and safety, regulations and legislation that apply to the workplace.

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

#### Prerequisite Unit

None

#### Unit Sector

Surveying and Spatial Information Services

#### Elements and Performance Criteria

1. Prepare to create spatial data	<ul style="list-style-type: none"><li>1.1 Confirm project requirements in consultation with appropriate person.</li><li>1.2 Determine acceptance levels of data quality required for project in consultation with appropriate person.</li><li>1.3 Select data creation methods and resources including source data to meet project requirements.</li><li>1.4 Select data validation methods to meet project requirements.</li><li>1.4 Comply with legal requirements, including data privacy, copyright and licensing while undertaking the project.</li></ul>
2. Create spatial data	<ul style="list-style-type: none"><li>2.1 Access source data required resources.</li><li>2.2 Create spatial data using Geographic Information System (GIS) application tools</li></ul>

	<p>2.3 Use topological rules to define permissible relationships between features.</p> <p>2.4 Resolve numerical and topological errors arising through processing.</p> <p>2.5 Store spatial data according to enterprise requirements.</p>
3. Validate spatial data quality.	<p>3.1 Use industry-accepted methods for evaluating the consistency, precision, accuracy and completeness of spatial data according to project specifications.</p> <p>3.2 Resolve data quality issues in spatial data.</p> <p>3.3 Identify and record the limitations of the spatial data according to enterprise requirements.</p>
4. Prepare metadata statement	<p>4.1 Document the validated dataset by completing a metadata statement according to enterprise requirements.</p> <p>4.2 Complete and file documentation according to enterprise requirements.</p> <p>4.3 Advise relevant users of the availability of the metadata according to enterprise requirements.</p>

### Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

### Unit Mapping Information

Supersedes and is not equivalent to CPPSIS5035 Obtain and validate spatial data

### Links

The Companion Implementation Guide for the CPP Property Services Training Package is available at <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

## Assessment Requirements for CPPSSI5035 Create spatial data

### Modification history

Release	Comments
1	<del>Replaces superseded equivalent CPPSIS5035A Obtain and validate spatial data. This version first released with CPP Property Services Training Package Version 3.</del>

### Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by creating and validating three spatial datasets comprising the spatial data types of point, line and polygon.

Each of the spatial datasets must incorporate attribute data and use geoprocessing functions of:

- merge
- clip
- dissolve
- buffer
- intersect
- union.

### Knowledge Evidence

To be competent in this unit a candidate must demonstrate knowledge of:

- spatial data quality features
- ANZLIC/ICSM Metadata Best Practice Recommendation for resource metadata attributes:
  - title
  - identifier
  - abstract
  - time
  - responsible party
  - access, Use, Security
  - status
  - lineage
  - topic category
  - keywords.
- key features of spatial reference systems
- methods for validating spatial datasets
- reliable source of data
- spatial data types
- spatial data capture methodologies
- spatial data formats and structures
- industry-accepted standards relating to validating spatial data
- metadata standard AS/NZS ISO 19115.1:2015.

### Assessment Conditions

Assessors must satisfy the requirements for assessors contained in the Standards for Registered Training Organisations.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting where these skills and knowledge would be performed.

Candidates must have access to:

- computer with appropriate software for spatial data management
- enterprise specifications for policies and procedures relating to:
  - work health and safety
  - data privacy and information copyright and licensing.

### Links

The Companion Volume Implementation Guide for the CPP Property Services Training Package is available at <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>