



Australian Government

CPPSSI5035 Create spatial data

Release: 1

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Modification History

Release 1 This version first released with CPP Property Services Training Package Release 12.0.

This unit supersedes and is not equivalent to CPPSIS5035 Obtain and validate spatial data.

Application

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

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 (WHS) legislation and regulations that apply to the workplace.

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

Pre-requisite Unit

Nil.

Unit Sector

Surveying and Spatial Information Services

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

- | | |
|---------------------|---|
| 1 Prepare to create | 1.1 Confirm project requirements in consultation with |
|---------------------|---|

spatial data.	appropriate person.
	1.2 Determine acceptance levels of data quality required for project in consultation with appropriate person.
	1.3 Select data creation methods and resources including source data to meet project requirements.
	1.4 Select data validation methods to meet project requirements.
	1.5 Comply with legislative requirements, including data privacy, copyright and licensing while undertaking the project.
2 Create spatial data.	2.1 Access required data resources.
	2.2 Create spatial data using geographic information system (GIS) application tools.
	2.3 Use topological rules to define permissible relationships between features.
	2.4 Resolve numerical and topological errors arising through processing.
	2.5 Store spatial data according to organisational requirements.
3 Validate spatial data quality.	3.1 Use industry-accepted methods for evaluating the consistency, precision, accuracy and completeness of spatial data according to project specifications.
	3.2 Resolve data quality issues in spatial data.
	3.3 Identify and record the limitations of the spatial data according to organisational requirements.
4 Prepare metadata statement.	4.1 Document the validated dataset by completing a metadata statement according to organisational requirements.
	4.2 Complete and file documentation according to organisational requirements.

- 4.3 Advise relevant users of the availability of the metadata according to organisational requirements.

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

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPSSI5035 Create spatial data

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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
- AS/NZS ISO 19115-1:2015 Geographic information – Metadata Fundamentals:
 - title
 - identifier
 - abstract
 - time
 - responsible party
 - access, use, security
 - status
 - lineage
 - topic category
 - keywords
- key features of spatial reference systems

- geometry and attributes of spatial datasets
- 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 Geographic information – Metadata Fundamentals.

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
- organisational procedures relating to data privacy, copyright and licensing.

Links

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