



Australian Government

CPPSSI5036 Integrate spatial datasets

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 equivalent to CPPSIS5036 Integrate spatial datasets.

Application

This unit specifies the skills and knowledge required to use technology and software applications to integrate spatial datasets to provide spatially referenced information. It includes obtaining spatial and attribute data, creating datasets, and linking spatial and attribute data to meet specifications for spatial data solutions. The unit also includes analysing and compiling metadata sets, assessing geographic coverage, establishing filtering parameters, and checking and validating the accuracy 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.

Cadastral surveying must be undertaken under the supervision of a registered surveyor. Users must check with the relevant regulatory state/territory authority before delivery.

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 Performance criteria describe what needs to be done to

essential outcomes.	demonstrate achievement of the element.
1 Prepare to integrate datasets.	1.1 Determine spatially referenced information requirements according to project specifications. 1.2 Apply safe work practices for using screen-based equipment.
2 Obtain spatial and attribute data.	2.1 Use metadata to determine sources of data consistent with project specifications. 2.2 Use industry-accepted software applications to obtain spatial data, create datasets, and link attribute data. 2.3 Comply with legislative requirements relating to data privacy, copyright and licensing when accessing and using spatial data. 2.4 Check data for integrity and quality according to project specifications and organisational requirements. 2.5 Assess geographic coverage for completeness according to project specifications. 2.6 Compile metadata set based on sourced spatial data. 2.7 Prepare exception reports on non-conformance and report to appropriate persons according to organisational requirements.
3 Create resultant spatial datasets.	3.1 Establish filtering parameters in line with scientific accuracy, redundancy and project specifications. 3.2 Translate spatial data into industry-accepted formats that satisfy project specifications. 3.3 Populate spatial datasets with edited spatial data according to project specifications and organisational requirements.
4 Link spatial and attribute data.	4.1 Identify method required for referencing location of attribute data according to organisational requirements. 4.2 Reference and link spatial and attribute data according to

- client specifications and organisational requirements.
- 4.3 Carry out spatial queries on spatial data to access attribute data according to project specifications.
- 5 Test and validate spatial datasets.
- 5.1 Determine and implement test queries to confirm that spatial datasets meet project specifications and organisational requirements.
- 5.2 Check and validate accuracy and integrity of spatial data and functionality of links and resolve identified problems where required according to organisational requirements.
- 5.3 Complete documentation according to organisational requirements and notify appropriate persons of project results.

Foundation Skills

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

Unit Mapping Information

Supersedes and is equivalent to CPPSIS5036 Integrate spatial datasets.

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 CPPSSI5036 Integrate spatial datasets

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Performance Evidence

To demonstrate competency a candidate must meet the elements and performance criteria of this unit by integrating spatial datasets for the purpose of providing spatially referenced information for two different projects.

Knowledge Evidence

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

- principles and methods of data acquisition for photogrammetry, remote sensing, terrestrial survey and hydrography
- database querying techniques and languages
- key features of spatial data
- types of metadata
- legislative requirements for accessing and manipulating spatial data, including copyright and licensing
- methods for comparing and checking different spatial datasets
- quality guidelines for validity of spatial data
- software applications used to compute spatial datasets
- key features of spatial coordinate and reference systems
- spatial data formats and structures
- spatial database design tools
- key characteristics of spatial database operation
- spatial dataset integration methods, including role of scale in dataset integration.

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.

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