



Australian Government

CPPSIS4024 Source and assess spatial data

Release: 1

CPPSIS4024 Source and assess spatial data

Modification History

Release 1.

Replaces superseded equivalent CPPSIS4024A Collect and set out spatial data.

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

Application

This unit of competency specifies the outcomes required to source spatial data from a range of media and datasets, and assess its availability and suitability for use in meeting client requirements. The unit covers researching and assessing data suppliers and information, such as metadata and attributes, to determine the most suitable sources of available data to meet job specifications. The unit also covers collecting and setting out data using a computer and software suitable for manipulating and presenting spatial data. The unit requires the ability to measure and reduce data and write technical reports.

The unit supports those who work in support positions for surveying and mapping, town planning, cartography and 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. Source spatial data. | 1.1. Job specifications for required spatial data are identified in consultation with <i>appropriate persons</i> . |
| | 1.2. Search is undertaken of a range of media to identify sources of potential spatial data. |
| | 1.3. <i>Metadata</i> , datasets and attributes are obtained and assessed to determine most appropriate data source |

according to job specifications.

- 1.4. Potential sources of spatial data are listed according to job specifications and organisational requirements.
2. Assess potential spatial data.
 - 2.1. Potential spatial data and datasets are assessed for suitability against job specifications.
 - 2.2. Availability of suitable spatial data is verified with potential suppliers, and constraints are identified according to organisational requirements.
 - 2.3. Spatial data indexing, backup and archiving requirements are determined to ensure currency.
3. Prepare data suitability report.
 - 3.1. Spatial data is collected and set out according to job specifications and organisational requirements.
 - 3.2. Administrative and industry requirements for data collection are complied with and recorded.
 - 3.3. **Documentation** is 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
Initiative and enterprise skills to:	identify situations requiring the need to obtain further sample data to ensure data suitability.
Numeracy skills to:	- interpret and compare data version information - measure spatial data components.
Oral communication skills to:	ask questions to clarify data requirements.

- Reading skills to:
- interpret graphical and technical information from maps and photographs.
- Writing skills to:
- prepare clear and accurate technical reports that can be interpreted by a third party.
- Technology skills to:
- use a computer and software to set out and format spatial data.
- Problem-solving skills to:
- implement contingency measures where there are constraints on the use of spatial data.

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:
- client
 - colleague
 - qualified surveyor
 - supervisor or line manager
 - spatial data provider.

- Metadata*** must include at least four 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.

Documentation must include:

- written assessment of data availability, including cost, licensing conditions, and constraints on use
- written assessment of suitability of available data in meeting requirements for accuracy, completeness, coverage, density, logical consistency and specifications.

Unit Mapping Information

CPPSIS4024A Collect and set out 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 CPPSIS4024 Source and assess spatial 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 source and assess the availability and suitability of spatial data for two different projects in consultation with colleagues.

While sourcing and assessing the above spatial data, the person must:

- clarify job specifications, including extent, content, intended use, accuracy, precision and format of spatial data
- complete required documentation, including written assessments as specified in the range of conditions
- communicate clearly with others to clarify and discuss work tasks
- comply with legal and organisational requirements relating to:
 - completing records and documentation
 - copyright and ownership of spatial data
 - using and storing equipment
 - working safely
- perform spatial data measurements, reduction and manipulation with accuracy
- set out spatial data and related attributes, including:
 - colour
 - layer
 - level
 - line type
 - line width
 - text
- verify availability of suitable data with suppliers, taking into account copyright and ownership constraints.

Knowledge Evidence

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

- accuracy and precision requirements relating to measuring and recording spatial data

- key features of spatial reference systems
- methods for assessing the availability and suitability of spatial data
- potential sources of spatial data and datasets
- range of basic spatial data capture and data set-out methodologies
- requirements to comply with data license agreements and copyright
- spatial data formats, handling and structure
- spatial data recording and reduction techniques.

Assessment Conditions

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

- equipment:
 - computer with software appropriate for spatial data manipulation and set-out
 - printer
- specifications:
 - job specifications
 - organisational policies and procedures relating to:
 - work health and safety
 - data privacy and information copyright
- physical conditions:
 - access to equipped work station
- relationships with team members and supervisor:
 - working in a team.

Timeframe:

- as specified by 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.

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