



Australian Government

CPPSIS5039 Plan and implement spatial projects

Release: 1

CPPSIS5039 Plan and implement spatial projects

Modification History

Release 1.

Replaces superseded equivalent CPPSIS5039A Produce spatial project deliverables.

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

Application

This unit of competency specifies the outcomes required to plan, implement and complete spatial projects to produce client-specified deliverables. The unit covers project planning processes to allocate and organise equipment, materials and resources; adhere to financial, administrative and legal requirements; and manage project risks and contingencies. The unit also covers designing, producing and validating spatial project deliverables and products. It requires the ability to interpret technical information relating to spatial products, and to communicate verbally and in writing with a range of project stakeholders.

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 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. Develop spatial project plan. | 1.1. Spatial project specifications and client requirements are identified and analysed, and then confirmed and clarified with <i>appropriate persons</i> . |
| | 1.2. Resources, equipment and materials are determined and organised according to project specifications and |

- organisational requirements.
- 1.3. Appropriate persons are informed of their involvement in project, parameters of their responsibilities, and project communication processes.
 - 1.4. Key activities and timelines are scheduled with full consideration given to project specifications, available resources, and organisational requirements.
 - 1.5. Risk management and contingency strategies are incorporated into documented project plan to meet administrative, legal and organisational requirements.
2. Implement spatial project plan.
- 2.1. Project management mechanisms are implemented to monitor, record and report project progress in relation to project plan.
 - 2.2. Computations and analysis are undertaken for spatial product development according to project specifications.
 - 2.3. Project deliverables are designed and produced according to project specifications and project plan.
 - 2.4. **Metadata** is created according to project specifications and organisational requirements.
 - 2.5. Project deliverables are validated against project specifications and irregularities are identified, reported and resolved.
3. Monitor and complete spatial project.
- 3.1. Project is monitored against specifications and plan, and contingencies managed to ensure quality is maintained.
 - 3.2. Actual expenditure is monitored to control costs according to organisational requirements.
 - 3.3. Project is completed and checked to ensure compliance with specifications, plan and organisational requirements.
 - 3.4. Project documentation is completed and outcomes are reported to appropriate persons.

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
Learning skills to:	• identify areas for improvement to meet budget constraints.
Numeracy skills to:	• use mathematical language and representation to prepare and communicate budgetary and financial information.
Oral communication skills to:	• ask questions to seek information and confirm understanding.
Reading skills to:	• interpret detailed technical descriptions of surveying data • interpret graphical information within image data.
Writing skills to:	• develop plans, reports and recommendations using technical language.
Technology skills to:	• use a computer and software to manage, manipulate, archive and retrieve 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.

<i>Appropriate persons</i>	• client
must include at least	• end user
two of the following:	• manager • qualified surveyor • spatial data provider • supplier.

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.

Unit Mapping Information

CPPSIS5039A Produce spatial project deliverables

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 CPPSIS5039 Plan and implement spatial projects

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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 plan and implement two different projects to produce spatial products that meet specific client requirements.

While planning and implementing the above spatial projects, the person must:

- design and produce spatial project deliverables that meet specifications and client requirements
- accurately record metadata
- apply contingency measures and risk management strategies to ensure quality of project deliverables
- comply with legal, administrative and organisational requirements for:
 - allocating and using resources, materials and equipment
 - communicating with clients and stakeholders
 - copyright of spatial data
 - designating tasks within the work team
 - meeting financial management obligations
 - recording and reporting information, and completing documentation
- coordinate technical and human resources to undertake scheduled work activities
- exercise accuracy and precision when performing computations and spatial data analysis and manipulation
- use a computer and software to develop plans, reports and recommendations relating to the project
- use project management techniques to plan, schedule, measure, monitor and report project activities and outcomes.

Knowledge Evidence

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

- legal requirements for accessing, using and storing spatial data, including data privacy and information copyright

- methods for assessing and validating integrity of existing spatial datasets and dataset sources
- organisational policies and procedures relating to:
 - budget and resource constraints
 - client service and stakeholder communication
 - completing records, reports and documentation
 - quality and industry standards relating to spatial products
- techniques for managing risk to comply with administrative and legal requirements of spatial projects
- project management tools, techniques and methodologies
- project management techniques, including resource planning and costing
- spatial data formats, structures and presentation methods
- key features of spatial reference systems.

Assessment Conditions

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

- equipment:
 - computer, software and ancillary hardware to produce reports
- specifications:
 - project and client specifications for spatial product
 - organisational policies and procedures relating to:
 - work health and safety
 - data privacy and information copyright
- 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.

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