



**Australian Government**

# **CPPSIS6041 Compile mine survey plans**

**Release: 1**

# CPPSIS6041 Compile mine survey plans

## Modification History

Release 1.

Replaces superseded equivalent CPPSIS6041A Compile mine survey plan.

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

## Application

This unit of competency specifies the outcomes required to compile a mine survey plan using computer-aided design (CAD) programs to produce mine drawings. The unit covers identifying and planning project deliverables and liaising with clients and others to present project specifications and report on outcomes. The unit also covers organising work processes by implementing project management mechanisms; checking and validating essential surveying information; planning for risks and contingencies; and creating a survey database, file structures and conventions and metadata. The unit requires the ability to use specialist surveying tools and techniques to measure, reduce and validate spatial data and create mine plans, cross-sections and plots.

The unit supports those who work in a technical management role in a mining environment and take responsibility for liaising with clients and end users to meet project requirements.

Licensing, legislative, regulatory or certification requirements apply to this unit in some States where mining surveying must be undertaken under the supervision of a registered surveyor. Relevant state and territory regulatory authorities should be consulted to confirm those requirements.

## 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. Organise work processes. | 1.1. Client requirements and project specifications are determined in consultation with <i>appropriate persons</i> . |
|-----------------------------|--|

- 1.2. Design information is accessed and interpreted to identify spatial data requirements and components to be measured and monitored.
  - 1.3. Essential surveying information is checked for currency and validity.
  - 1.4. Survey database, file structures and conventions, and *metadata* are created according to project specifications.
  - 1.5. Project management mechanisms are implemented to schedule, measure, record and report progress of activities in relation to agreed timeframes and plans.
  - 1.6. Risk management and contingency strategies are followed to ensure project complies with legal, statutory and organisational requirements.
  - 1.7. Agreed communication processes between client and other appropriate persons are implemented and maintained.
2. Standardise mine survey plan requirements.
    - 2.1. Requirements for lodging plan are identified according to organisational requirements.
    - 2.2. Mine plan drawing and plotting requirements are researched and summarised to meet project specifications.
    - 2.3. Contingencies and constraints are managed and problems resolved to ensure plans meet specifications.
3. Produce mine survey plans.
    - 3.1. Measured spatial data is reduced to project reference system.
    - 3.2. Mine plans are created according to project specifications and organisational requirements.
    - 3.3. Measurements are validated and recorded according to project specifications.
4. Finalise mine
    - 4.1. Mine survey plans are finalised and relevant personnel notified of results according to organisational

survey plans.

requirements.

- 4.2. Documentation is completed and spatial data archived 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.

<b>Skill</b>	<b>Performance feature</b>
Initiative and enterprise skills to:	<ul style="list-style-type: none"> <li>• translate specifications into drawing designs.</li> </ul>
Numeracy skills to:	<ul style="list-style-type: none"> <li>• apply coordinate system to measured spatial data</li> <li>• apply understanding of height, depth, dimension and position to actual operational activity and virtual representation.</li> </ul>
Oral communication skills to:	<ul style="list-style-type: none"> <li>• liaise with clients to identify plotting detail.</li> </ul>
Reading skills to:	<ul style="list-style-type: none"> <li>• interpret graphical information in cross-sections and plans</li> <li>• interpret technical drawing standards.</li> </ul>
Writing skills to:	<ul style="list-style-type: none"> <li>• record measurements in a format that can be interpreted by a third party.</li> </ul>
Technology skills to:	<ul style="list-style-type: none"> <li>• calibrate specialist surveying equipment to take measurements</li> <li>• operate hardware, including computers and plotters</li> <li>• use CAD software to create plans.</li> </ul>
Problem-solving skills to:	<ul style="list-style-type: none"> <li>• identify legal non-compliance issues.</li> </ul>

## 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 two of the following:
- client
  - colleague
  - end user
  - registered or qualified surveyor
  - site personnel
  - supplier.
- Metadata*** must include at least eight 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

CPPSIS6041A Compile mine survey plan

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>