



Australian Government

Department of Education, Employment and Workplace Relations

CPCCB6011A Establish systems to develop and monitor building and construction costs

Release: 1

CPCCB6011A Establish systems to develop and monitor building and construction costs

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit of competency specifies the outcomes required to facilitate, implement and maintain a construction costing system in a building and construction organisation which is involved in either residential or commercial projects. It supports the establishment of the human resources and facilities necessary to produce accurate and successful costing information, providing a basis for accurate estimating and tendering processes in accordance with organisational guidelines.

Application of the Unit

Application of the unit

This unit of competency supports builders, project managers and related construction industry professionals responsible for coordinating and managing residential and commercial building or construction projects.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units Nil

Employability Skills Information

Employability skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Quantify and qualify factors to be included in the organisation costing system.	1.1. Strategic factors impacting on the construction costing process are identified and quantified. 1.2. Range and scope of activities being undertaken by the organisation under the contract are quantified. 1.3. Strategic and operational factors impinging on organisation costing processes are qualified, and measures are introduced to capture cost data.
2. Establish and implement organisational costing system.	2.1. Design and development of organisational project planning system are directed and managed. 2.2. Criteria for implementing and maintaining systems concerned with costing the construction process are developed and formulated into active practice. 2.3. Methods are developed to gather and monitor actual cost information essential to construction costing process. 2.4. Approval of costing process is obtained from senior management. 2.5. Costing process is regularly evaluated to ensure accuracy and compliance with policy.
3. Establish and implement a costing quality control system.	3.1. Quality control procedures are based on sound financial principles and practices. 3.2. Staff are trained to ensure that quality assurance practices are applied to the costing process on a daily basis. 3.3. System is developed that allows reconciliation of invoices for progress payments against work completed, or due for completion, prior to payments being approved.
4. Develop and implement a costing feedback system.	4.1. Method to effectively and quickly communicate financial information concerning construction costs within the organisation is established and implemented. 4.2. Review and feedback system is developed and maintained using company project records and performance criteria to identify cost over-runs or savings within the contract. 4.3. Subcontractor feedback system, based on performance, progress and other strategic factors, is planned and strategically implemented.
5. Establish recording and costing evaluation system.	5.1. Documentation and recording system are instituted to meet organisational needs for ongoing evaluation of costing process. 5.2. Strategic balances and checks are applied that enable

ELEMENT**PERFORMANCE CRITERIA**

the ongoing maintenance of quality of the costing system.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills for this unit are:

- communication skills to:
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - read and interpret documents from a variety of sources
 - seek approval from senior management
 - seek feedback
 - train staff
 - use and interpret non-verbal communication
 - use language and concepts appropriate to cultural differences
 - written skills to complete relevant documentation
- conceptualisation of unique solutions to complex problems and situations
- facilitation skills to implement new and modified systems
- interpretation of strategic and often ambiguous information to ensure logical and practical decisions
- management skills, including the ability to delegate tasks within specific functional guidelines and direct activities of personnel involved in the estimating and tendering process
- numeracy skills to apply calculations to interpret costs
- supervisory skills to monitor and oversee the performance of systems and individuals involved in the process
- technological skills to facilitate use of the organisation's software and office equipment.

Required knowledge

Required knowledge for this unit is:

- appropriate sector of the building and construction industry and the nature of contracts upon which its activities are based
- factors to be considered in assessing the risk inherent in different types of building

REQUIRED SKILLS AND KNOWLEDGE

and construction projects

- financial and business administration principles commensurate with organisational needs
- human resource practices and industry's industrial relations climate and practices
- socioeconomic and political factors which determine the climate in that sector of the building and construction industry.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

This unit of competency could be assessed by the development and implementation of an organisational construction costing system. This should include relevant aspects of the monitoring process to ensure continued financial viability of the organisation.

This unit of competency can be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

A person who demonstrates competency in this unit must be able to provide evidence of the ability to:

- implement effective cost development and monitoring system
- apply management practices that result in a high level of staff productivity
- interact effectively with personnel both within and external to the organisation
- develop conceptual and strategic problem solving and systems
- communicate effectively both verbally and in writing with senior management, employees, clients, regulatory authorities and legal representatives.

Context of and specific resources for assessment

This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.

Assessment of essential underpinning knowledge will usually be conducted in an off-site context.

Assessment is to comply with relevant regulatory or Australian standards' requirements.

Resource implications for assessment include:

- documentation that should normally be available in either a building or construction

EVIDENCE GUIDE

office

- relevant codes, standards and regulations
- office equipment, including calculators, photocopiers and telephone systems
- computers with appropriate software to view 2-D CAD drawings, run costing programs and print copies
- current publications on measurement, design, building construction and manufacturers' product literature
- copies of appropriate awards and workplace agreements
- a suitable work area appropriate to the construction process.

Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.

Method of assessment

Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Training Package
- include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- reinforce the integration of employability skills with workplace tasks and job roles
- confirm that competency is verified and able to be transferred to other circumstances and environments.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances

EVIDENCE GUIDE

assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge

- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence.

Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Strategic factors impacting on the construction costing process include:

- availability and accessibility of historical records
- availability of materials and suppliers costs
- awards, agreements and work practices
- construction methodologies and practices
- extent of information and anticipated degree of risk
- margins, allowances, rates and penalties
- organisational performance data
- plant, equipment and provision of services.

Strategic and operational factors

- ability to gather specific information

RANGE STATEMENT

impinging on organisation costing processes include:

concerning actual versus estimated costs

- establishment of internal and external performance management systems
- relationships with organisation's financial management and construction management systems.

RANGE STATEMENT

Criteria for implementing and maintaining systems concerned with costing the construction process include:

- establishing and maintaining accurate estimating practices
- gathering and classifying appropriate strategic and performance information
- using the services of well trained and experienced personnel in the costing process.

Quality control procedures for maintaining costing involve obtaining adequate feedback from clients, subcontractors and suppliers and include:

- establishing performance benchmarks for system
- maintaining a quality dialogue with parties to construction process
- monitoring internal expenditure and funding allocations.

Evaluation of **recording system** and costing system includes:

- establishing and maintaining comprehensive records of bids
- maintaining appropriate manual or electronic databases to assist performance comparisons
- programmed and spontaneous reviews of success rates
- providing secure and safe accommodation for costing information.

Unit Sector(s)

Unit sector Construction

Co-requisite units

Co-requisite units Nil

Functional area

Functional area