# RII06 Civil Construction

# Training Package

# Volume III of III

**This Training Package comprises three (3) volumes.**
Volume 1 contains Introductory material and the RII Units of Competency
(to 400 series).Volume II contains the RII 500 and
RII 600 series Units of Competency.
Volume III contains the Imported Units of Competency.

**RII06 Civil Construction Training Package**

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# RII06 Resources and Infrastructure Civil Construction Training Package

# Introduction

The Resources and Infrastructure Civil Construction Training Package RII06 is the first Training Package to be developed under the Resources and Infrastructure Industry Skills Council (RIISC) and is an addition to the Civil Construction Training Package BCC03. RIISC is in the process of consolidating all Training Packages under its coverage and this involves recoding all Units of Competency and qualifications as Resources and Infrastructure (RII) units and qualifications as each Training Package is reviewed.

The Civil Construction Training Package BCC03 covers Units of Competency and qualifications at Australian Qualifications Framework (AQF) Certificate II and Certificate III level. Extensive industry consultation identified the need for Units of Competency and qualifications to address all aspects of the Civil Construction industry and provide a career path with AQF qualifications from Certificate I to Advanced Diploma level.

The Resources and Infrastructure Civil Construction Training Package RII06 has been developed to cover these additional areas. In particular RII06 would cover entry to the Civil Construction industry, higher technical operations, supervisory and management areas and civil construction design (in addition to the operational areas covered in BCC03).

The Civil Construction Training Package BCC03 endorsement runs out at the end of 2006. In the review of BCC03 all Units of Competency and qualifications will be recoded as RII units and qualifications. A revised Resources and Infrastructure Civil Construction Training Package RII06 will then cover Units of Competency and qualifications from AQF Certificate I to Advanced Diploma level for the Civil Construction industry.

RII06 Resources and Infrastructure Civil Construction Training Package details the sets of competencies required by those employed within the Civil Construction industry and covers new entrants, (including labour market entrants), operators and managers as well as the existing Civil Construction sector workforce.

## The Civil Construction Industry

The Civil Construction industry plays a large part in Australia's economic life; it is an integral component in the infrastructure essential for our day to day living. Those working in the industry are primarily engaged in civil engineering work on infrastructure-related projects covering such diverse fields as roads, subdivisions, bridgeworks, railways, harbours, sewerage and drainage, electrical infrastructure, pipelines and recreation works.

Civil construction is the most significant participant in the built environment active across a range of sectors — the commercial sector, as well as Local and State Government. It is also associated with industries such as mining.

The Australian Industry Group's Construction Outlook 2005 survey shows that engineering infrastructure will maintain its position as a key driver of economic growth reflected in continued high levels of work on road and rail projects combined with solid growth in the utilities sector (electricity infrastructure, water supply and sewerage), telecommunications and other civil projects.

The Civil Construction industry is estimated to employ in excess of 97,000 (based on ABS2001 figures) in the range from design and supervisory occupations, plant operations

to other labouring occupations. Total employment increased by 9.2% in the twelve months to 2005 and these figures, combined with associated industries, mean that upwards of 164,135 Australians employed. Seasonally adjusted figures for 2004–2005, indicate that work done across the sector accounted for over $48 billion (up from $30 billion in 2003–2004); generally reflective of increased investment in infrastructure by various States and Territories as well as developments associated with the significant activities in the resources sector.

Typical values of work (in $billion) commenced during 2004–2005 are:

- Roads and subdivisions   12. 092

- Electrical infrastructure   5. 583

- Recreation works           1. 905

- Sewerage and drainage     1. 226

- Railways                   1. 472

- Bridgework                 0. 372

- Pipelines                  0. 848

- Water storage and supply 1.157

- Harbours                   0.483

Buoyant activity and strong investment in the industry drives continued employment growth. A significant factor in this is the fact that approximately 94% of enterprises operating in the Civil Construction sector employ 5 or fewer employees. The 2004 Australian Industry Group survey reported that 33.3% of the industry had major difficulty recruiting labour and sourcing sub contractors; therefore recruitment of qualified labour (including professional and supervisory staff) remains the dominant supply constraint for the industry.

There are significant changes in industry technology contributing to significant enhancement of existing practices and operations, or diversification of work organisation models (for example, via multifunctional plant and equipment requiring new and effective work models). Work demands on this vital industry sector will continue to grow as outsourcing of government activities related to Civil Construction continue to increase.

A number of general or broadly based peak employer and industry associations and a group of more narrowly focussed associations represent those employed in the industry. They include:

- Association of Consulting Engineers Australian (ACEA)

- Australian Asphalt Pavement Association (AAPA)

- Australian Contractors Association (ACA)

- Australian Stabilisation Industry Association (AustStab)

- Cement Concrete & Aggregates Australia (CCAA)

- Civil Contractors Federation (CCF)

- Demolition and Contractors Association

- Institute of Public Works and Engineers (IPWEA)

- Australian Local Government Association (ALGA)

- National Association of Women in Construction (NAWIC)

In general, the Australian Contractors Association covers the larger commercial interests and the Civil Contractors Federation covers a broad range of small, medium and large enterprises. Union representation and coverage is provided, in the main, by the Construction, Forestry, Mining and Energy Union (CFMEU) and the Australian Workers Union (AWU).

# RII06 Civil Construction Imported Units of Competency

## BSBCMN402A Develop work priorities

**Unit Descriptor**     This unit covers the skills and knowledge required to plan own work schedules, monitor and obtain feedback on work performance and development.

This unit is related to BSBCMN302A Organise personal work priorities and development.

**Competency Field**     Common

| Element | Performance Criteria |
|---|---|
| 1. Plan and complete own work schedule | 1.1 *Workgroup* plans are prepared to reflect consideration of resources, client needs and workgroup targets |
| | 1.2 *Work objectives* and priorities are analysed and incorporated into personal schedules and responsibilities |
| | 1.3 *Factors* affecting the achievement of work objectives are identified and contingencies established and incorporated into work plans |
| | 1.4 *Business technology* is used efficiently and effectively to manage and monitor planning completion and scheduling of tasks |
| 2. Monitor own work performance | 2.1 Personal performance standards are identified and analysed through self-assessment and feedback from others on the achievement of work objectives |
| | 2.2 *Feedback on performance* is actively sought from colleagues and clients and evaluated in context of individual and group requirements |
| | 2.3 Variations in the quality of service and products are routinely identified and reported in accordance with *organisational requirements* |
| 3. Coordinate professional development | 3.1 Personal knowledge and skills are assessed against *competency standards* performance descriptions to determine development needs and priorities |
| | 3.2 Opportunities for improvement and sources of learning are researched and planned in liaison with colleagues |
| | 3.3 *Feedback* is used to identify and develop ways to improve competence within available opportunities |
| | 3.4 New skills are identified and *professional development activities* are accessed and completed to facilitate continuous learning and career development |

| **Element** | **Performance Criteria** |
|---|---|
| | 3.5 Records and documents relating to achievements and assessments are stored and maintained in accordance with organisational requirements |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **They may use legislation, codes and national standards relevant to the workplace including:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| **Workgroup plans may include:** | • sales plans<br>• reporting plans<br>• production plans<br>• budgetary plans<br>• team participation<br>• work schedules<br>• team and individual learning goals |
| **Work objectives may include:** | • sales targets<br>• reporting deadlines<br>• production targets<br>• budgetary targets<br>• team participation<br>• team and individual learning goals |
| **Factors affecting the achievement of work objectives may include:** | • competing work demands<br>• technology/equipment breakdowns<br>• unforeseen incidents<br>• personnel<br>• environmental factors such as time, weather, etc<br>• resource and materials availability<br>• budget constraints |

## Range Statement

| | |
|---|---|
| **Business technology may include:** | • computers<br>• computer applications<br>• personal schedules<br>• modems<br>• scanners<br>• email and internet/intranet/extranet<br>• photocopiers<br>• facsimile machines<br>• printers |
| **Feedback on performance may include:** | • formal/informal performance appraisals<br>• obtaining comments from supervisors and colleagues<br>• obtaining comments from clients<br>• personal, reflective behaviour strategies<br>• routine organisational methods for monitoring service delivery |
| **Organisational requirements may be included in:** | • quality assurances and/or procedures manuals<br>• goals, objectives, plans, systems and processes<br>• legal and organisational policy/guidelines and requirements<br>• business and performance plans<br>• access and equity principles and practice<br>• ethical standards<br>• OHS policies, procedures and programs<br>• quality and continuous improvement processes and standards<br>• defined resource parameters |
| **Competency standards are standards which measure:** | • all those personal and technical knowledge, skills and attitudinal aspects (competencies) required to effectively and efficiently undertake the day-to-day tasks and duties of the practitioner's work function |

## Range Statement

| Professional development activities may include: | • coaching, mentoring and/or supervision |
|---|---|
| | • formal/informal learning programs |
| | • internal/external training provision |
| | • work experience/exchange/opportunities |
| | • personal study |
| | • career planning/development |
| | • performance appraisals |
| | • workplace skills assessment |
| | • Recognition of Prior Learning |

## Evidence Guide

The Evidence Guide identifies the critical aspects, underpinning knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| Critical Aspects of Evidence | • Preparing and communicating work plans |
|---|---|
| | • Scheduling work objectives and tasks to support the achievement of goals |
| | • Seeking and acting on feedback from clients and colleagues |
| | • Reviewing own work performance against achievements through self-assessment |
| | • Accessing learning opportunities to extend own personal work competencies |
| | • Using business technology to monitor self development |
| **Underpinning Knowledge\*** <br><br> \* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts. | • The relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • Understanding the organisation's policies, plans and procedures |
| | • Understanding of methods to elicit, analyse and interpret feedback |
| | • Knowledge of techniques to prepare personal plans and establish priorities |
| | • Knowledge of quality standards for products and services |
| | • Knowledge of relevant business technology applications |

# Evidence Guide

|  | • Understanding of methods to evaluate own performance |
| --- | --- |
|  | • Processes to interpret competency standards and apply them to self |
|  | • Methods to identify and prioritise personal learning needs |
|  | • Understanding of range of professional development activities and criteria to apply in choosing between them |
| **Underpinning Skills** | • Literacy skills to understand the organisation's policies and procedures; interpret competency standards; use a variety of strategies for planning and reviewing own work |
|  | • Problem solving skills to develop contingency plans |
|  | • Evaluation skills for assessing outcomes |
|  | • Communication skills including giving and receiving constructive feedback on development needs |
|  | • Technology skills including the ability to select and use technology appropriate to a task |
|  | • Time management skills to complete tasks within agreed timeframes |
|  | • Observation skills for identifying opportunities for learning and development |
|  | • Participation skills for integrating as a member of a work team |
|  | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
|  | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |

## Evidence Guide

- Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment

- Assessment should reinforce the integration of the key competencies and the Business Services Common Competencies for the particular AQF Level. Refer to the Key Competency Levels at the end of this unit

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## Key Competency Levels

*NB:   These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 1 | Level 2 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information** —to measure self-performance
- **Communicating ideas and information** —with members of the work team
- **Planning and organising activities** —for self
- **Working with teams and others** —in completing scheduled tasks
- **Using mathematical ideas and techniques** —as an aid to measure and schedule tasks
- **Solving problems** — as an aid to self-development
- **Using technology** —to manage scheduling and completion of tasks

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

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## BSBCMN404A Develop teams and individuals

| | |
|---|---|
| **Unit Descriptor** | This unit covers the skills and knowledge required to determine individual and team development needs and facilitate the development of the workgroup. |
| | This unit is related to BSBCMN304A Contribute to personal skill development and learning. |

| | |
|---|---|
| **Competency Field** | Common |

| **Element** | **Performance Criteria** |
|---|---|
| 1.  Determine development needs | 1.1  *Learning and development needs* are systematically identified and implemented in line with *organisational requirements* |
| | 1.2  A learning plan to meet individual and group training and development needs is collaboratively developed, agreed to and implemented |
| | 1.3  Individuals are encouraged to self evaluate performance and identify areas for improvement |
| | 1.4  *Feedback on performance* of team members is collected from relevant sources and compared with established team learning needs |
| 2.  Develop individuals and teams | 2.1  Learning and development program goals and objectives are identified to match specific knowledge and skill requirements of *competency standards* |
| | 2.2  *Learning delivery methods* are appropriate to the learning goals, the learning style of participants, and availability of *equipment and resources* |
| | 2.3  Workplace learning opportunities and *coaching and mentoring assistance* are provided to facilitate individual and team achievement of competencies |
| | 2.4  Development opportunities incorporate a range of activities and support materials appropriate to the achievement of identified competencies |
| | 2.5  Resources and timelines required for learning activities are identified and approved in accordance with organisational requirements |
| 3.  Monitor and evaluate workplace learning | 3.1  Feedback from individuals or teams is used to identify and implement improvements in future learning arrangements |
| | 3.2  Outcomes and performance of individuals/teams are assessed and recorded to determine the effectiveness of development programs and the extent of additional development support |

| **Element** | **Performance Criteria** |
|---|---|
| | 3.3 Modifications to learning plans are negotiated to improve the efficiency and effectiveness of learning |
| | 3.4 Records and reports of competency are documented and maintained within organisational requirements |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| **Learning and development needs may include:** | • coaching, mentoring and/or supervision |
| | • formal/informal learning programs |
| | • internal/external training provision |
| | • work experience/exchange/opportunities |
| | • personal study |
| | • career planning/development |
| | • performance appraisals |
| | • workplace skills assessment |
| | • Recognition of Prior Learning |
| **Organisational requirements may be included in:** | • quality assurances and/or procedures manuals |
| | • goals, objectives, plans, systems and processes |
| | • legal and organisational policy/guidelines and requirements |
| | • OHS policies, procedures and programs |
| | • confidentiality and security requirements |
| | • business and performance plans |
| | • anti-discrimination and related policy |

## Range Statement

|  | |
|---|---|
| | • access and equity principles and practice |
| | • ethical standards |
| | • quality and continuous improvement processes and standards |
| | • defined resource parameters |

**Feedback on performance may include:**

- formal/informal performance appraisals
- obtaining feedback from supervisors and colleagues
- obtaining feedback from clients
- personal, reflective behaviour strategies
- routine organisational methods for monitoring service delivery

**Competency standards are standards which measure:**

- all those personal and technical knowledge, skills and attitudinal aspects (competencies) required to effectively and efficiently undertake the day-to-day tasks and duties of the practitioner's work function

**Learning delivery methods may include:**

- on-the-job coaching or mentoring
- problem solving
- presentations/demonstrations
- formal course participation
- work experience
- involvement in professional networks
- conference and seminar attendance
- induction

**Equipment and resources may include:**

- funding
- facilities
- guest speakers
- training equipment such as whiteboards and audiovisual equipment
- technological tools and equipment
- time

## Range Statement

| | |
|---|---|
| **Coaching and mentoring assistance may include:** | • providing feedback to another team member |
| | • fair and ethical practice |
| | • non-discriminatory processes and activities |
| | • respecting the contribution of all participants and giving credit for achievements |
| | • presenting and promoting a positive image of the collective group |
| | • problem solving |
| | • providing encouragement |

## Evidence Guide

The Evidence Guide identifies the critical aspects, underpinning knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Identifying and implementing learning opportunities for others |
| | • Giving and receiving feedback constructively |
| | • Facilitating participation of individuals in the work of the team |
| | • Negotiating learning plans to improve the effectiveness of learning |
| | • Preparing learning plans to match skill needs |
| | • Accessing and designing learning opportunities |
| **Underpinning Knowledge\*** <br><br> \* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts. | • The relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • Knowledge of the principles of coaching and mentoring for development of competence |
| | • Understanding how to work effectively with team members who have diverse work styles, aspirations, cultures and perspectives |
| | • Understanding how to facilitate team development and improvement |
| | • Knowledge of the organisation's policies, plans and procedures |
| | • Understanding methods and techniques for eliciting and interpreting feedback |
| | • Understanding methods for identifying and prioritising personal development opportunities and options |

# Evidence Guide

|  |  |
|---|---|
|  | • Knowledge of career paths and competency standards in the industry |
| **Underpinning Skills** | • Literacy skills to read and understand a variety of texts; prepare general information and papers according to target audience; spell with accuracy; use grammar and punctuation effectively as an aid to understanding; maintain records of learning |
|  | • Communication skills including receiving feedback and reporting, maintaining effective relationships and conflict management |
|  | • Planning skills to organise required resources and equipment to meet learning needs |
|  | • Coaching and mentoring skills to provide support to colleagues |
|  | • Report writing skills to organise information; assess information for relevance and accuracy; identify and elaborate on learning outcomes |
|  | • Facilitation skills to conduct small group training sessions |
|  | • Time management skills for scheduling learning programs within work activities |
|  | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
|  | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |

## Evidence Guide

- Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment
- Assessment should reinforce the integration of the key competencies and the Business Services Common Competencies for the particular AQF Level. Refer to the Key Competency Levels at the end of this unit

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## Key Competency Levels

*NB:     These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information** — to measure team performance
- **Communicating ideas and information** — with members of the work team
- **Planning and organising activities** — for learning opportunities
- **Working with teams and others** — in completing scheduled tasks
- **Using mathematical ideas and techniques** — as an aid to measure learning outcomes
- **Solving problems** — as an aid to team-development
- **Using technology** — to manage scheduling of tasks

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

## BSBCMN408A Report on financial activity

| | |
|---|---|
| **Unit Descriptor** | This unit covers the reporting of financial activity for business both in response to client requests and to meet statutory requirements such as the completion of statutory requirement reports. |
| | This unit is related to BSBCMN308A Maintain financial records. |
| **Competency Field** | Common |

| **Element** | **Performance Criteria** |
|---|---|
| 1. Compile financial information and data | 1.1 Current *financial data* is collected, evaluated and coded to ensure consistency, quality and accuracy in accordance with *organisational requirements* |
| | 1.2 *Conversion and consolidation procedures* are used to compile analysis in accordance with organisational requirements |
| | 1.3 Asset and liability valuations are made, recorded and disclosed in accordance with organisational requirements |
| | 1.4 *Discrepancies*, unusual features or queries are identified, resolved or referred to the appropriate authority |
| 2. Prepare statutory requirement reports | 2.1 Income and expenditure is correctly recorded to ensure compliance with *statutory requirements* |
| | 2.2 Liabilities for tax are calculated in accordance with current legislation and *revenue gathering practices* |
| | 2.3 Relevant receipts, *revenue documentation* and payments are identified correctly |
| | 2.4 Statements and claims take full advantage of *available benefits and allowances* in accordance with statutory requirements |
| | 2.5 Statutory requirement reports are submitted to appropriate authorities within *stated deadlines* |
| 3. Provide financial business recommendations | 3.1 *Recommendations* are logically derived and supported by *evidence* in report |
| | 3.2 Recommendations propose constructive actions to enhance the effectiveness and efficacy of functions and services |
| | 3.3 Recommendations are concise and facilitate direction and control of organisation's operations |

| Element | Performance Criteria |
|---|---|

**Element**        **Performance Criteria**

3.4   *Significant issues* in statements including comparative financial performances are identified and prioritised for review and decision-making

3.5   Structure and *format* of reports are clear and conform to organisational and statutory requirements

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

**Legislation, codes and national standards relevant to the workplace may include:**

- award and enterprise agreements and relevant industrial instruments
- relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination
- relevant industry codes of practice

**Financial data may include:**

- budgets and forecasts
- financial/operational statements and reports (eg. expenditures and receipts, profit and loss statements)
- market valuations
- budget variances
- cash flow/profit reports
- Australian Bureau of Statistics (ABS) economic data
- financial markets monitoring services (eg, Reuters)

**Organisational requirements may include:**

- quality assurances and/or procedures manuals
- price and exchange parameters
- reporting requirements
- legal and organisational policy/guidelines and requirements
- financial analysis assessments
- OHS policies, procedures and programs
- recording and filing systems
- standard financial analysis techniques
- financial management manuals

## Range Statement

| | |
|---|---|
| **Conversion and consolidation procedures may include:** | <ul><li>spreadsheets</li><li>standardised variables</li><li>moving averages</li><li>unit costs</li><li>trend analysis</li></ul> |
| **Discrepancies may include:** | <ul><li>expenditure report mismatches</li><li>incorrect payments</li><li>absence of auditable trail</li><li>inappropriate authorisations</li><li>variances from budget and phasings</li><li>unreconciled cash flows and operating statements</li><li>incorrect report formats</li></ul> |
| **Statutory requirements may include:** | <ul><li>reporting periods</li><li>taxation payment timings</li><li>delegated authorities</li><li>internal control procedures</li></ul> |
| **Revenue gathering practices may include:** | <ul><li>sales</li><li>leasing</li><li>investments</li><li>billing schedules</li><li>lending and financing</li><li>fees and charges</li></ul> |
| **Revenue documentation may include:** | <ul><li>invoices</li><li>declarations</li><li>bills</li><li>sales proceeds</li><li>cash received</li><li>debit notes</li></ul> |
| **Available benefits and allowances may include:** | <ul><li>depreciation</li><li>donations</li><li>sales tax deductions</li><li>interest payments</li></ul> |

## Range Statement

| | |
|---|---|
| **Stated deadlines may include:** | • monthly returns |
| | • annual reports |
| | • lodgement dates |
| | • payment schedules |
| | |
| **Recommendations may relate to:** | • profit |
| | • loss |
| | • expenses |
| | • consolidation |
| | • write-offs |
| | • cash flow |
| | |
| **Evidence may include:** | • budgetary analysis |
| | • forecasts and estimates |
| | • returns on investments |
| | • order and supplier documentation |
| | • taxation and statutory returns |
| | |
| **Significant issues may include:** | • profitability |
| | • losses and returns |
| | • cost structures |
| | • suppliers |
| | • internal controls |
| | • statutory obligations |
| | |
| **Format of reports may include:** | • cash flow statements |
| | • statutory forms |
| | • financial year reports |
| | • balance sheets |
| | • operating statements |
| | • spreadsheets |
| | • electronic forms |

# Evidence Guide

The Evidence Guide identifies the critical aspects, underpinning knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

| **Critical Aspects of Evidence** | • Organising financial data to highlight relevant features |
| | • Presenting of information in comprehensive formats |
| | • Completing of Business Activity Statements |
| | • Interpreting and identifying applications of statutory requirements |
| | • Referring discrepancies outside scope of own responsibility to the appropriate persons |
| **Underpinning Knowledge\*** <br><br> • At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts. | • The relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • Knowledge of organisational policies and procedures relating to maintaining financial data, reporting, preparing statutory returns |
| | • Principles of double entry bookkeeping and accrual accounting |
| | • Knowledge of techniques for forecasting and analysis |
| | • Understanding methods to present financial data |
| | • Knowledge of State and Federal Government taxes and charges |
| | • Knowledge of financial legislation |
| | • Knowledge of options, methods and practices for deductions, benefits and depreciations |
| | • Principles and practices for auditing and reporting |
| **Underpinning Skills** | • Literacy skills to identify financial information, to follow Australian Accounting and Auditing Standards and the organisation's accounting procedures |
| | • Research skills to analyse the organisations financial and business status |
| | • Proof reading skills to check accuracy and consistency of information by consulting additional resources |

# Evidence Guide

- Problem solving skills for a defined range of predictable problems
- Report writing skills to assess information for relevance and accuracy from a range of sources
- Decision making skills in a limited range of options
- Numeracy skills for calculating data, reconciling figures
- Planning skills for timetabling and scheduling reports and lodgements
- Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

| | |
|---|---|
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | <ul><li>Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement</li><li>Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package</li><li>Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment</li><li>Assessment should reinforce the integration of the key competencies and the Business Services Common Competencies for the particular AQF Level. Refer to the Key Competency Levels at the end of this unit</li></ul> |

## Key Competency Levels

*NB: These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 2 | Level 2 | Level 2 | Level 3 | Level 2 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform    2. Administer    3. Design

- **Collecting, analysing and organising information** — to forecast and provide recommendations
- **Communicating ideas and information** — with members of the work team
- **Planning and organising activities** — for completion of statutory returns and reports
- **Working with teams and others** — in completing scheduled tasks
- **Using mathematical ideas and techniques** — in reconciling financial documents
- **Solving problems** — to identify discrepancies and errors
- **Using technology** — to complete allocated tasks

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBCMN410A Coordinate implementation of customer service strategies

| | |
|---|---|
| **Unit Descriptor** | This unit covers the skills and knowledge required to advise on, and carry out customer service strategies, and evaluate customer strategies on the basis of feedback and design strategies for improvement.

This unit is related to BSBCMN310A Deliver and monitor a service to customers. |

| | |
|---|---|
| **Competency Field** | Common |

| **Element** | | **Performance Criteria** | |
|---|---|---|---|
| 1. | Advise on customer service needs | 1.1 | Customer service *needs* are clarified and accurately assessed using appropriate *communication techniques* |
| | | 1.2 | Problems matching service delivery to *customers* are diagnosed and options for improved service are developed within *organisational requirements* |
| | | 1.3 | Advice is relevant, constructive and promotes the improvement of customer service delivery |
| | | 1.4 | *Business technology* is used to structure and present information on customer service needs |
| 2. | Support implementation of customer service strategies | 2.1 | Customer service strategies and opportunities are promoted to *designated individuals and groups* |
| | | 2.2 | Available budget resources are identified and allocated to fulfil customer service objectives |
| | | 2.3 | *Procedures to resolve customer difficulties* and *complaints* are actioned promptly within organisational requirements |
| | | 2.4 | *Coaching and mentoring assistance* is provided to colleagues to overcome difficulties in meeting *customer service standards* |
| | | 2.5 | Decisions to implement strategies are taken in consultation with designated individuals and groups |
| 3. | Evaluate and report on customer service | 3.1 | Client satisfaction with service delivery is reviewed using verifiable data in accordance with organisational requirements |
| | | 3.2 | Changes necessary to maintain service standards are identified and reported to designated groups and individuals |
| | | 3.3 | Conclusions and recommendations are prepared from verifiable evidence and provide constructive advice on future directions of client service strategies |

| Element | Performance Criteria |
|---|---|
| | 3.4 Systems, records and reporting procedures are maintained to compare changes in customer satisfaction |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| **Customer needs may relate to:** | • advice or general information<br>• specific information<br>• further information<br>• making an appointment<br>• complaints<br>• purchasing organisation's products and services<br>• returning organisation's products and services<br>• accuracy of information<br>• fairness/politeness<br>• prices/value |
| **Communication techniques may include:** | • consultation methods, techniques and protocols<br>• analysing customer satisfaction surveys<br>• conducting interviews<br>• questioning<br>• summarising and paraphrasing<br>• seeking feedback to confirm understanding<br>• making recommendations<br>• obtaining management decisions<br>• analysing quality assurance data |

## Range Statement

| | |
|---|---|
| **Customers can be:** | • internal or external |
| | • other agencies |
| | • individual members of the organisation |
| | • corporate customers |
| | • individual members of the public |
| **Organisational requirements may include:** | • quality assurances and/or procedures manuals |
| | • goals, objectives, plans, systems and processes |
| | • legal and organisational policy/guidelines and requirements |
| | • OHS policies, procedures and programs |
| | • confidentiality and security requirements |
| | • anti-discrimination and related policy |
| | • access and equity principles and practice |
| | • ethical standards |
| | • quality and continuous improvement processes and standards |
| | • defined resource parameters |
| | • who is responsible for products or services |
| | • pricing and discount policies |
| | • replacement and refund policy and procedures |
| | • payment and delivery options |
| **Business technology may include:** | • photocopier |
| | • computer |
| | • printer |
| | • binder |
| | • shredder |
| | • answering machine |
| | • fax machine |
| | • telephone |
| **Designated individuals and groups may include:** | • supervisor |
| | • customers |
| | • colleagues |
| | • external organisation |
| | • committee |
| | • line management |

## Range Statement

**Procedures to resolve customer difficulties may include:**
- using conflict management techniques
- refund of monies
- item replacement
- referrals to supervisor
- review of products or services
- external agencies (eg Ombudsman)

**Customer complaints may include:**
- damaged goods or goods not delivered
- administrative errors such as incorrect invoices or prices
- warehouse or store room errors such as incorrect product delivered
- service errors
- delivery errors
- products not delivered on time
- customer satisfaction with service quality

**Coaching and mentoring assistance may include:**
- providing feedback to another team member
- fair and ethical practice
- non-discriminatory processes and activities
- respecting the contribution of all participants and giving credit for achievements
- presenting and promoting a positive image of the collective group
- problem solving
- providing encouragement

**Customer service strategies may include:**
- delivery times
- price offers
- product/service availability
- product/refund guarantees
- merchandise characteristics
- courtesy/politeness

## Evidence Guide

The Evidence Guide identifies the critical aspects, underpinning knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

# Evidence Guide

| | |
|---|---|
| **Critical Aspects of Evidence** | • Identifying needs and priorities of the organisation in delivering services to customers |
| | • Distinguishing between different levels of customer satisfaction |
| | • Providing constructive advice on customer service practices |
| | • Responding to and reporting on customer feedback |
| | • Designing strategies to improve delivery of products and services |
| **Underpinning Knowledge\*** | • The relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| \* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts. | • Understanding the principles of customer services |
| | • Understanding the organisation's business structure, products and services |
| | • Understanding the organisation's policy and procedures for customer service including handling customer complaints |
| | • Knowledge of product and service standards and best practice models |
| | • Knowledge of common problems relating to customer service |
| | • Understanding consultation methods, techniques and protocols |
| | • Knowledge of techniques for dealing with customers with special needs |
| **Underpinning Skills** | • Planning skills to develop implementation schedules |
| | • Evaluation skills to assess effectiveness of customer service strategies |
| | • Literacy skills to interpret a variety of texts; prepare information and papers; write formal and informal letters according to target audience |
| | • Interpersonal skills to relate effectively to people from a range of social, cultural and ethnic backgrounds |
| | • Technology skills including the ability to select and use technology appropriate to a task |
| | • Problem solving skills to diagnose organisational problems relating to customer services |
| | • Report writing skills to provide recommendations for |

# Evidence Guide

|  | the enhancement of products or services |
| --- | --- |
|  | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
|  | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
|  | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
|  | • Assessment should reinforce the integration of the key competencies and the Business Services Common Competencies for the particular AQF Level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:*    *These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform      2. Administer      3. Design

- **Collecting, analysing and organising information** — to monitor and report on customer services
- **Communicating ideas and information** — on products and services
- **Planning and organising activities** — to enhance products and services
- **Working with teams and others** — in completing scheduled tasks
- **Using mathematical ideas and techniques** — to determine service or product costs
- **Solving problems** — to respond to customer enquiries or complaints
- **Using technology** — to complete allocated tasks

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

## BSBCMN411A Monitor a safe workplace

| | |
|---|---|
| **Unit Descriptor** | This unit is concerned with OHS responsibilities of employees with supervisory responsibilities to implement and monitor the organisation's OHS policies, procedures and programs in the relevant work area to meet legislative requirements. This unit has been adapted from Generic Competency B in the *National Guidelines for Integrating Occupational Health and Safety Competencies into National Industry Competency Standards* [NOHSC:7025 (1998) 2nd edition]. |
| | This unit is related to BSBCMN311A Maintain workplace safety |

| | |
|---|---|
| **Competency Field** | Common |

| **Element** | **Performance Criteria** |
|---|---|
| 1. Provide information to the work group about OHS policies and procedures | 1.1 Relevant provisions of *Occupational Health and Safety legislation and codes of practice* are accurately explained to the work group |
| | 1.2 Information on the *organisation's Occupational Health and Safety policies, procedures and programs* is provided in a readily accessible manner to the work group |
| | 1.3 Information about *identified hazards* and the outcomes of *risk assessment* and control is regularly provided and clearly explained to the work group |
| 2. Implement and monitor participative arrangements for the management of OHS | 2.1 The importance of effective consultative mechanisms in managing health and safety risks are explained |
| | 2.2 Consultative procedures are implemented and monitored to facilitate participation of work group in management of work area hazards |
| | 2.3 Issues raised through consultation are promptly dealt with in accordance with *organisational consultation procedures* |
| | 2.4 The outcomes of consultation over OHS issues are recorded and communicated promptly to the work group |
| 3. Implement and monitor the organisation's procedures for providing OHS training | 3.1 OHS training needs are systematically identified in line with organisational requirements |
| | 3.2 Arrangements are made to meet OHS training needs of team members in consultation with relevant individuals |

| **Element** | | **Performance Criteria** | |
| --- | --- | --- | --- |
| | | 3.3 | Workplace learning opportunities and coaching and mentoring assistance are provided to facilitate team and individual achievement of identified training needs |
| | | 3.4 | Costs associated with provision of training for work team are identified and reported to management for inclusion in financial plans |
| 4. | Implement and monitor procedures for identifying hazards and assessing risks | 4.1 | Hazards in work area are identified and reported in accordance with OHS policies and procedures |
| | | 4.2 | Team member hazard reports are actioned promptly in accordance with organisational procedures |
| 5. | Implement and monitor the organisation's procedures for controlling risks | 5.1 | *Procedures to control risks* are implemented using the hierarchy of controls and organisational requirements |
| | | 5.2 | Inadequacies in existing risk control measures are identified and reported in accordance with hierarchy of controls |
| | | 5.3 | Outcomes of reported inadequacies are monitored where appropriate to ensure a prompt organisational response |
| 6. | Implement and monitor the organisation's procedures for maintaining OHS records for the team | 6.1 | *Occupational Health and Safety records* of incidents of occupational injury and disease in work area are accurately completed and maintained in accordance with OHS legal requirements |
| | | 6.2 | Aggregate information and data from work area records are used to identify hazards and monitor risk control procedures in work area |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments<br><br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br><br>• relevant industry codes of practice |
| **OHS legislation will depend on State and Territory legislation and requirements and will include:** | • common law duties to meet the general duty of care requirements<br><br>• requirements for the maintenance and confidentiality of records of occupational injury and disease<br><br>• provision of information, induction and training<br><br>• regulations and approved codes of practice relating to hazards present in work area<br><br>• health and safety representatives and health and safety committees<br><br>• prompt resolution of health and safety issues |
| **Organisational OHS policies and procedures may include:** | • procedures for hazard identification<br><br>• procedures for risk assessment, selection and implementation of risk control measures<br><br>• incident (accident) investigation<br><br>• OHS audits and safety inspections<br><br>• consultative arrangements for employees in work area<br><br>• hazard reporting procedures<br><br>• safe operating procedures/instructions<br><br>• use and care of personal protective equipment<br><br>• emergency and evacuation procedures<br><br>• purchasing policy and procedures<br><br>• plant and equipment maintenance and use<br><br>• hazardous substances use and storage<br><br>• dangerous goods transport and storage<br><br>• OHS arrangements for on site contractors, visitors and members of public<br><br>• First Aid provision/medical practitioner contact and attention<br><br>• site access |

## Range Statement

| | |
|---|---|
| **Identifying hazards and assessing risk may occur through activities such as:** | • workplace inspections in area of responsibility<br>• consulting work team members<br>• housekeeping<br>• OHS audits and review of audit reports<br>• daily informal employee consultation and regular formal employee meetings<br>• checking equipment before and during work<br>• review of health and safety records including hazard reports, hazardous substances and dangerous goods registers, injury records |
| **Organisational procedures for consultation may include:** | • formal and informal meetings<br>• health and safety committees<br>• election of health and safety representatives in accordance with legislative requirements<br>• attendance of health and safety representatives at management and OHS planning meetings<br>• other committees, for example, planning and purchasing<br>• early response to employee suggestions, requests, reports and concerns put forward to management<br>• counselling/disciplinary processes |
| **Controlling risks may include actions such as:** | • removing the cause of a risk at its source (eliminating the hazard) eg. removing stored goods permanently from emergency exit passageways<br>• selecting control measures in accordance with the hierarchy, ie work through hierarchy from most effective to least effective controls.<br>• job/process/workplace redesign eg introduce mechanical handling equipment, rearrange materials' flow/timing/scheduling, raise/lower work platforms.<br>• consultation with employees and their representatives |
| **Organisational health and safety records may include:** | • audit and inspection reports<br>• workplace environmental monitoring records<br>• consultation eg meetings of health and safety committees, work group meeting agendas including OHS items and actions<br>• induction, instruction and training<br>• manufacturer's and supplier's information including dangerous goods storage lists |

## Range Statement

- hazardous substances registers
- plant and equipment maintenance and testing reports
- workers compensation and rehabilitation records
- First Aid/medical post records

## Evidence Guide

The Evidence Guide identifies the critical aspects, underpinning knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Apply organisational management systems and procedures to OHS within work group area |
| | • Identify and comply with OHS legal and organisational requirements |
| | • Apply procedures for identifying hazards in the work area |
| | • Apply procedures for assessing and controlling risks to health and safety associated with those hazards, in accordance with the hierarchy of control. |
| | • Provide specific, clear and accurate information and advice on workplace hazards to work group |
| | • Provide appropriate supervision of work group |
| **Underpinning Knowledge\*** | • The relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| \* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts. | • Knowledge of the legal responsibilities of employers, supervisors and employees in the workplace |
| | • Knowledge of hazards and associated risks which exist in the workplace |
| | • Knowledge of organisation's policies and procedures relating to hazard management, fire, emergency, evacuation, incident (accident) investigating and reporting |
| | • Understanding the relevance of consultation as a key mechanism for improving workplace OHS culture |
| | • Knowledge of the principles and practices of OHS management |
| | • Knowledge of characteristics and composition of the workgroup |

## Evidence Guide

| | |
|---|---|
| **Underpinning Skills** | • Analysing skills to identify hazards and assess risks in the work area |
| | • Data analysis skills including: |
| |    • incident (accident) monitoring |
| |    • environmental monitoring |
| |    • evaluation of effectiveness of risk control measures |
| | • Assessment skills to assess resources required to apply risk control measures |
| | • Literacy skills for comprehending documentation and interpreting OHS requirements |
| | • Technology skills including the ability to operate and shut down equipment |
| | • Coaching and mentoring skills to provide support to colleagues |
| | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the Business Services Common Competencies for the particular AQF Level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:    These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information** — to obtain information to advise colleagues of safety responsibilities
- **Communicating ideas and information** — to resolve safety and environmental issues with work team
- **Planning and organising activities** — to plan resource requirements
- **Working with teams and others** — to consult on the control of risk
- **Using mathematical ideas and techniques** — to calculate resource requirements
- **Solving problems** — to investigate improved work methods
- **Using technology** — to use computing systems to access safety information

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

## BSBCMN412A Promote innovation and change

| | |
|---|---|
| **Unit Descriptor** | This unit covers the skills and knowledge required to promote the use and implementation of innovative work practices to effect change. |
| | This unit is related to BSBCMN312A Support innovation and change. |

| | |
|---|---|
| **Competency Field** | Common |

| **Element** | **Performance Criteria** |
|---|---|
| 1. Identify and develop opportunities for improved work practices | 1.1 Options for change incorporate identified improvements to work practices and procedures |
| | 1.2 *Risk factors* affecting change are analysed to identify potential constraints |
| | 1.3 Change is planned and resourced to promote the introduction and management of new processes |
| | 1.4 Benefits of *change* are clear and consistent with *organisational requirements* |
| | 1.5 Timelines and targets for implementation are realistic and support the achievement of change |
| 2. Lead team to foster innovative work practices | 2.1 Team members are selected to maximise innovative opportunities |
| | 2.2 Work assignments are organised to facilitate *innovative work skills* |
| | 2.3 Team members are provided with guidance and coaching on innovation in the workplace |
| | 2.4 Models of innovative work practice are provided and discussed |
| 3. Facilitate commitment to workplace change | 3.1 Opinions and suggestions on improving work practices are encouraged to facilitate participation in change processes |
| | 3.2 Goals and objectives of change are communicated clearly and promptly to individuals and teams |
| | 3.3 *Business technology* is used to manage and provide access to information on progress towards objectives of change |
| | 3.4 *Mentoring and coaching* is provided to support individuals and groups in introduction of change |
| | 3.5 Decisions to overcome problems in the implementation of change are made in consultation with designated individuals and groups |

| Element | Performance Criteria |
|---|---|
| | 3.6 Effective relations and communications are maintained with clients and stakeholders during the process of change |
| 4. Monitor and evaluate change | 4.1 Organisation's systems and technology are used to *monitor progress* towards objectives |
| | 4.2 Team members are actively encouraged to reflect on team activities and opportunities for improvement and innovation |
| | 4.3 Team activities are evaluated based on feedback from team members, management, clients and other interested people |
| | 4.4 Suggestions for work improvements made by team members are positively received and acted on where appropriate |
| | 4.5 *Evidence and information* on the impact of change is accurate, relevant and reported within organisational requirements |
| | 4.6 Recommendations for improving methods or techniques to manage change are negotiated with designated individuals and groups using appropriate *negotiation skills* |
| | 4.7 Systems, records and reporting procedures are maintained according to organisational requirements |
| | 4.8 Feedback on individual and group work practices is prompt and constructive |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |

## Range Statement

| | |
|---|---|
| **Change may include:** | • implementation of new work practices and/or services<br>• organisational restructures<br>• introduction of new technology<br>• change in work location<br>• new client base<br>• staffing changes<br>• job role changes<br>• work priorities |
| **Innovative work skills are:** | • the skills required to come up with and develop new ideas or the new use of an old idea. They include:<br>  • interpretation<br>  • conceptualisation<br>  • representation<br>  • reflection<br>  • evaluation |
| **Organisational requirements may be included in:** | • quality assurances and/or procedures manuals<br>• goals, objectives, plans, systems and processes<br>• legal and organisational policy/guidelines and requirements<br>• OHS policies, procedures and programs<br>• business and performance plans<br>• anti-discrimination and related policy<br>• access and equity principles and practice<br>• ethical standards<br>• quality and continuous improvement processes and standards<br>• defined resource parameters<br>• consultation and communication processes |
| **Risk factors may include:** | • disturbances to workflow<br>• confusion/loss of confidence<br>• cost blow out<br>• supplier problems<br>• product/service delivery problems<br>• time delays |

## Range Statement

| | |
|---|---|
| **Business technology may include:** | • computer<br>• internet/extranet/intranet<br>• email<br>• software<br>• answering machine<br>• fax machine<br>• telephone |
| **Mentoring and coaching may include:** | • providing feedback to another team member<br>• fair and ethical practice<br>• non-discriminatory processes and activities<br>• respecting the contribution of all participants and giving credit for achievements<br>• presenting and promoting a positive image of the collective group<br>• problem solving<br>• providing encouragement |
| **Monitoring progress may include:** | • weekly report<br>• monthly report<br>• consultative groups<br>• OHS<br>• union delegates<br>• financial departments<br>• public profiles |
| **Evidence and information may include:** | • customer surveys<br>• employee satisfaction<br>• industrial disputes<br>• supplier feedback<br>• productivity measures<br>• cost savings<br>• market share data |

## Range Statement

**Negotiation skills may include:**
- assertiveness
- collaboration
- solution designing
- confidence building
- conflict reduction
- stress management
- empathising

## Evidence Guide

The Evidence Guide identifies the critical aspects, underpinning knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

**Critical Aspects of Evidence**
- Analysing and evaluating problems associated with change
- Developing processes to introduce change
- Establishing plans and schedules to achieve the objectives of change
- Presenting information on the causes and introduction of the change
- Communicating priorities, goals and objectives
- Gathering evidence on the effect of change

**Underpinning Knowledge***

\* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts.

- The relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination
- Understanding of common effects of change and innovation in the workplace
- Understanding of industrial and organisational context of change
- Understanding of organisation's policies, plans, procedures and structure
- Knowledge of resources required by the organisation's operations
- Understanding processes to interpret and apply feedback
- Knowledge of principles and techniques of goal setting and recording priorities
- Knowledge of the principles of negotiation

| | |
|---|---|
| **Underpinning Skills** | • Literacy skills to read and understand a variety of texts; prepare general information and papers according to target audience; spell with accuracy; use grammar and punctuation effectively as an aid to understanding |
| | • Planning skills to schedule work activities for the implementation of change |
| | • Team work skills for working as a member of a team during period of changes |
| | • Consultation skills for including stakeholders in the change process |
| | • Analytical skills for monitoring outcomes of change |
| | • Negotiation skills for dealing with competing objectives |
| | • Estimation skills for identifying resources necessary to support introduction of change |
| | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the Business Services Common Competencies for the particular AQF Level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:* *These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform     2. Administer     3. Design

- **Collecting, analysing and organising information** — to set goals and objectives
- **Communicating ideas and information** — with members of the work team
- **Planning and organising activities** — to promote change
- **Working with teams and others** — in completing scheduled tasks
- **Using mathematical ideas and techniques** — as an aid to measure impact of change
- **Solving problems** — to diagnose problems of implementation
- **Using technology** — to manage scheduling of tasks

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBCMN413A Implement and monitor environmental policies

**Unit Descriptor**   This unit covers the implementation and monitoring of the organisation's environmental policies and procedures as an integral part of the organisation's business program. Those who work or who expect to work in a supervisory capacity would be advised to undertake this unit. It could also be useful for small business.

This unit is related to BSBCMN313A Maintain environmental procedures and BSBMGT506A Manage environmental performance. Consider co-assessment with BSBCMN411A Monitor a safe workplace

**Competency Field**   Common

| Element | Performance Criteria |
|---------|---------------------|
| 1. Provide information to the work team | 1.1 *Information* provided to the work team is explained in a clear and concise manner and is readily accessible by all employees |
| | 1.2 Organisation's *activities/performance* in regard to *environmental management and business sustainability* are conveyed to work team where required |
| | 1.3 Links between environmental, financial, safety and other risk areas and how these are integrated in organisational policies and practices are explained |
| | 1.4 Information on environmental systems and procedures and other risk areas within the area of management responsibility is provided |
| 2. Implement and monitor operational procedures | 2.1 Existing and potential *environmental risks* are identified and *assessed* and/or *expert advice* sought as required |
| | 2.2 Prioritised recommendations from the assessments are carried out as part of the organisation's operational procedures |
| | 2.3 Organisational environmental policies and procedures are implemented |
| | 2.4 Tasks are allocated and outcomes are monitored in accordance with organisational policies and targets |
| | 2.5 Contingency plan is implemented promptly when incidents occur |
| 3. Implement and monitor change and continuous improvement | 3.1 *Environmental improvement plans* are implemented for own work group and integrated with other operational activities |

| Element | Performance Criteria |
|---|---|
| | 3.2 *Best practice approaches* to improving environmental performance by reducing environmental risk and waste are identified, implemented and monitored |
| | 3.3 Suggestions and ideas about environmental management are sought from the work team and acted upon where appropriate |
| | 3.4 Suggestions are sought from *supply chain*, at tender/contract stage, for ways of improving environmental performance |
| 4. Implement and monitor recording procedures | 4.1 Internal and external reporting procedures are identified and implemented as required |
| | 4.2 *Environmental records* are accurately and legibly maintained and stored securely in a form accessible for reporting purposes |
| | 4.3 Information/records are monitored to identify trends that may require remedial action, and used to promote continuous improvement of environment performance |
| 5. Implement and monitor an environmental management training program | 5.1 *Environmental training* needs are identified accurately, specifying gaps between environmental competencies required and those held by group members |
| | 5.2 Arrangements are made for fulfilling identified training needs for the work group with relevant parties |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
|---|---|
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |

# Range Statement

| | |
|---|---|
| **Knowledge of legislation, codes, national standards, industry codes of practice and workplace policies and procedures must:** | • be strictly relevant to the particular workplace role and is not intended to include detailed technical aspects of environmental science and |
| | • details of legislation must be directly relevant to the workplace role, and would normally be delivered as a general awareness issue rather than a major part of the competencies |
| | • be consistent with the concept that people at this level, while working with some autonomy and possibly responsibility for the work of others, still generally work according to workplace policies and procedures |
| **Information may include:** | • organisational policies and procedures |
| | • relevant environmental legislation requirements |
| | • voluntary environmental agreements entered into with external organisations |
| | • continuous improvement policies and processes for the organisation |
| | • environmental data |
| **Work team may include:** | • formal or unstructured groups |
| | • two or more people |
| **Environmental performance may be defined as:** | • a measure of an organisation's impact on the environment and of their ability to manage that impact |
| **Some approaches to improving environmental performance may include, but are not restricted to:** | • preventing and minimising the production of pollution (eg discharges to air, land and water, hazardous waste) |
| | • improving housekeeping (eg using a broom instead of a hose, using old rags for cleaning instead of toxic cleaners or water) |
| | • substituting materials (eg replacing toxic solvent based coatings with water based ones) |
| | • changing processes (eg mechanical cleaning, re-design of products/ procedures so that materials are used more efficiently) |
| **Environmental management policies must be appropriate to the scope and scale of the business and may include:** | • environmental load reduction and waste minimisation |
| | • tenders for the provision of goods and services that specify environmentally preferred selection criteria |
| | • protection of land and habitat |
| | • environmentally sustainable work practices |
| | • continuous improvement policies |

## Range Statement

| | |
|---|---|
| **Business sustainability means:** | • a sustainable business in this sense is profitable and competitive for the foreseeable future. Effective management of environmental impacts and opportunities can contribute to business sustainability by reducing costs, differentiating goods and services and contributing to a better corporate image |
| **Environmental improvement plans may be established at management level and may include:** | • measuring, monitoring and recording environmental performance, and continually setting targets for measurable improvements<br>• all aspects of environmental performance including energy use, waste minimisation, recycling, transport use, etc |
| **Expert assistance and/or advice may be sought from:** | • internal or external sources/specialists<br>• consultants or other experts or specialists |
| **Links between environmental, financial and safety policies means:** | • an integrated approach to systems within the organisation |
| **Supply chain can be:** | • a key determinant of environmental performance<br>• a source of positive input and advice to enhance environmental performance |
| **Supply chain may include:** | • suppliers<br>• contractors<br>• others acting on organisation's behalf |
| **Environmental risks may be identified as:** | • actual and potential sources of *waste*<br>• pollution (eg discharges to air, land and water, hazardous waste)<br>• planned or unplanned emissions<br>• any aspect of the business operation which may have an impact on environmental performance |
| **and may be assessed:** | • on an ongoing basis<br>• with regard to probability, scale and likely impact on business and environmental performance |
| **Environmental training program should be:** | • integrated into the organisation's existing training arrangements |

# Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Evidence needs to be provided of the ability to implement and monitor integrated environmental management policies and procedures within an organisation. The work team must be informed of environmental and other risk areas, training needs must be addressed and records must be kept. |
| | • N.B. Particular note must be taken that evidence must be strictly relevant to the particular workplace role and is not intended to include detailed technical aspects of environmental science |
| **Underpinning Knowledge\*** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| \* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts. | • required knowledge is to be limited to that which is sufficient to perform the particular workplace competency and is intended to promote environmental awareness rather than technical environment competencies |
| | • relevant environmental systems and procedures |
| | • knowledge of best practice approaches relevant to own work area |
| | • quality assurance systems relevant to own work area |
| | • supply chain procedures |
| | • strategies to maximise opportunities and minimise impacts relevant to own work area |
| | • relevant knowledge of environmental issues especially in regard to water catchments, air, noise, ecosystems, habitat, waste minimisation relevant to own work area |

# Evidence Guide

| | |
|---|---|
| **Underpinning Skills** | • communication skills to ensure information is supplied to the work team |
| | • consultation skills to assist in workplace negotiations |
| | • literacy skills for comprehending documentation and interpreting environment requirements |
| | • operational skills relevant to the workplace, including the ability to operate and shut down equipment |
| | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the Business Services Common Competencies for the particular AQF Level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:* *These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform     2. Administer     3. Design

- **Collecting, analysing and organising information** — to provide information and advice
- **Communicating ideas and information** — to resolve environmental issues with the work team and external contacts
- **Planning and organising activities** — to plan training and to implement change and improvement
- **Working with teams and others** — to gain support for environmental policies
- **Using mathematical ideas and techniques** — to aid planning
- **Solving problems** — to implement change and maintain procedures
- **Using technology** — to assist implementation

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBCMN419A Manage projects

| | |
|---|---|
| **Unit Descriptor** | This unit covers the management of a straightforward project or a section of a larger project. It focuses on the application of project management skills and the requirement to meet timelines, quality standards, budgetary limits and other requirements set for the project. |
| **Competency Field** | Common |
| **Domain** | Project management |
| **Application of the Competency** | This unit addresses the management of projects including the development of a project plan, administering and monitoring the project, finalising the project and reviewing the project to identify lessons learnt for application to future projects. |
| | The unit does not apply to specialist project managers. For specialist project managers, the units of competency in the Project Management domain will be applicable. |

## Element

Elements define the critical outcomes of a unit of competency.

## Performance Criteria

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement.

**Define project**

1.1 *Project scope and other relevant documentation* is accessed

1.2 Project *stakeholders* are defined

1.3 Clarification is sought from *delegating authority* of any issues related to project and *project parameters*

1.4 Limits of own responsibility and reporting requirements are identified

1.5 Relationship of project to other projects and to the organisation's objectives is clarified

1.6 Available resources to undertake project are determined and accessed

**Develop project plan**

2.1 *Project plan* including timelines, task breakdown, roles and responsibilities is developed

2.2 Appropriate *project management tools* are identified and accessed

2.3 Risk management plan, which includes OHS, is formulated for project

2.4 Project budget is developed and approved

2.5 Team members are consulted and their views taken account of in planning the project

| | 2.6 | Project plan is finalised and any necessary approvals gained to commence project according to documented plan |
|---|---|---|
| **Administer and monitor project** | 3.1 | Action is taken to ensure that project team members are clear about their responsibilities and the requirements of the project |
| | 3.2 | *Support* is provided to project team members, especially with regard to special needs, to ensure that the quality of the expected outcomes of the project and documented timelines are met |
| | 3.3 | *Required record keeping systems* are established and maintained throughout the project |
| | 3.4 | Plans for managing project finances, human, physical and technical resources and quality are implemented and monitored |
| | 3.5 | Project reports are completed and forwarded as required to stakeholders |
| | 3.6 | *Risk management* is undertaken as required to ensure project outcomes are met |
| | 3.7 | Project deliverables are achieved |
| **Finalise project** | 4.1 | Financial record keeping associated with project is completed and checked for accuracy |
| | 4.2 | Staff involved in project are assigned to new roles or reassigned to previous roles |
| | 4.3 | Project documentation is completed and any necessary sign offs obtained for concluding project |
| **Review project** | 5.1 | Project outcomes and processes are reviewed against the project scope and plan |
| | 5.2 | Team members are involved in the review of the project |
| | 5.3 | Lessons learnt from project are documented and reported within the organisation |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| Legislation, codes and national standards relevant to the workplace which may include**:** | • award and enterprise agreements and relevant industrial instruments |
|---|---|
| | • relevant legislation from all levels of government that affects business operation, especially in regard to |

|  | OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
|---|---|
|  | • relevant industry codes of practice |
| *Project scope and other relevant documentation* **refers to:** | • project brief |
|  | • contract or other agreement |
|  | • project plan or summary |
|  | • other documents outlining the expected outcomes of the project, inclusions and exclusions from project, timeframes for project, quality standards for project, project resources |
| *Stakeholders* **might include:** | • project sponsor |
|  | • management, employees and relevant key personnel (internal and external) with special responsibilities |
|  | • clients or customers (internal and external) |
|  | • funding bodies |
| *Delegating authority* **might include:** | • project sponsor |
|  | • manager or management representative |
|  | • funding body |
|  | • customer or client |
| *Project parameters* **will include:** | • scope of project |
|  | • legislative and quality standards |
|  | • timelines |
|  | • finances for project |
|  | • integration of project within organisation |
|  | • risks associated with project, including OHS |
|  | • reporting requirements |
|  | • procurement requirements associated with project |
|  | • physical, human and technical resources available or required for project |
| *Project plan* **will include:** | • details of how the project will be executed including management of project in relation to the project parameters identified above |
| *Project management tools* **might include:** | • project management software |
|  | • technical resources required for the project e.g. OHS management system tools |
|  | • Gantt and bar charts |
|  | • PERT charts |
|  | • Critical Path Method |
|  | • cost schedule control system |

- logistics support analysis
- life cycle cost analysis
- spreadsheets

*Support for team members* **might include:**

- supervision, mentoring and coaching
- feedback
- encouragement
- additional physical, human and technical resources (within allocated budget) if and as required
- regular meetings of project team
- learning and development

*Required record keeping systems* **might include systems for:**

- financial data including costs, expenditure, income generated, purchases
- quality data including any test results
- recording of time spent on project and progress in completing project
- correspondence
- samples, prototypes, models
- outcomes of project

*Risk management* **might include:**

- seeking further resources to meet deadline
- negotiating an extension of deadline or redefining completion or quantities or quality of outcomes
- reducing costs
- researching and applying more efficient methods of completing project tasks
- sharing of ideas to gain improvements to work undertaken within the project
- outsourcing some aspects of the project
- changing roles and responsibilities within project team

*Necessary sign-offs* **might be required by:**

- project sponsor
- management
- funding body
- clients customers

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competency in this standard must be able to provide evidence that they have successfully managed projects — either a straightforward project or a section of a larger project.

This evidence will cover the application of project management skills and the meeting of timelines, quality standards, budgetary limits and other requirements set for the project.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | organisational policies and procedures that may impact on the project and management of the project, for example: |
| | - OHS |
| | - procurement |
| | - human resources |
| | - quality standards |
| | - risk assessment |
| | organisational structure and lines of authority and communication within the organisation |
| | how the project relates to organisation's overall mission, goals, objectives and operations |
| | available learning and development options external and internal to organisation |
| **Required skills and attributes include:** | ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| | communication and negotiation skills |
| | written and verbal communication skills |
| | ability to relate to team members and delegating authority, clients and customers as appropriate |
| | personal time management skills |
| | budget review and monitoring skills |
| | leadership and management skills |
| | use of project management tools |
| | attributes: |
| | - attention to detail |
| | - thoroughness |
| | - communicative |

- accuracy

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
|---|---|

Level (1) represents the competence to undertake tasks effectively
Level (2) represents the competence to manage tasks
Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

The bulleted points provide examples of how the key competencies can be applied for this unit.

| Communicating ideas and information (2) | • written and verbal communication skills for report writing, documenting project, working with team members and stakeholders |
|---|---|
| | • negotiating and consulting with team members, stakeholders |
| Collecting, analysing and organising information (2) | • gathering information associated with planning, monitoring and evaluating project |
| Planning and organising activities (2) | • scheduling required for project |
| | • supervising project team |
| Working in a team (3) | • leading project team |
| | • liaising with other enterprise personnel including management, funding bodies, customers/clients, stakeholders involved in project |
| Using mathematical ideas and techniques (1) | • applying basic numerical skills for managing finances associated with project and procurement activity |
| | • using basic numerical skills to develop schedules for project |
| Solving problems (2) | • identifying potential problems that may arise in project |
| | • addressing problems arising in project |
| Using technology (1) | • using word processing packages to complete necessary documentation |
| | • using spreadsheets or other relevant project management software and tools |
| Innovation skills (2) | • determining lessons learnt from project to apply to future projects |

| | |
|---|---|
| **Products that could be used as evidence include:** | • project plans<br>• emails, letters, financial statements, other documentation relating to project management and execution<br>• project reports<br>• samples, prototypes, other physical products produced in project<br>• reports of lessons learnt from review process |
| **Processes that could be used as evidence include:** | • how project scope and other relevant documentation was accessed<br>• how project stakeholders were defined<br>• how risk management plan was developed and implemented<br>• how resources were determined and accessed<br>• how project plan was formulated<br>• how project team members were led in managing project<br>• how project was monitored and managed<br>• how project was finalised and closure effected<br>• how project was reviewed |
| **Resource implications for assessment include:** | • access to workplace project documentation<br>• reports from third parties consulted in managing projects |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment<br>• at least three examples of projects managed by the assessee<br>• assessment may be through simulated project based activity or actual development and implementation of contracting arrangements |
| **Integrated competency assessment:** | • this unit can be assessed alone or as part of an integrated assessment activity involving other relevant common business and frontline management units associated with customer service delivery, teamwork, documentation and organising own work |

# BSBFLM403B Implement effective workplace relationships

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to collect, analyse and communicate information and to use that information to develop and maintain effective working relationships and networks, with particular regard to communication and representation. |
| **Competency Field** | *Business management services* |
| **Domain** | *Frontline management* |
| **Application of the Competency** | This unit replaces BSBFLM403A Manage effective workplace relationships |
| | Frontline managers play an important role in developing and maintaining positive relationships in internal and external environments so that customers, suppliers and the organisation achieve planned outputs and outcomes. They play a prominent part in motivating, mentoring, coaching and developing team cohesion through providing leadership for the team and forming the bridge between the management of the organisation and the team members. |
| | At this level, work will normally be carried out within routine and non-routine methods and procedures, which require planning and evaluation and leadership and guidance of others. |
| | This unit builds on BSBFLM303B Contribute to effective workplace relationships. Consider co-assessment with BSBFLM412A Promote team effectiveness. This unit is related to BSBFLM503B Manage effective workplace relationships |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Collect, analyse and communicate information and ideas** | 1.1 Relevant *information* is collected from appropriate sources, analysed and shared with the work team to improve work performance |
| | 1.2 Ideas and information are communicated in a manner which is appropriate and sensitive to the cultural and social diversity of the audience and any special needs |
| | 1.3 *Consultation processes* are implemented to encourage employees to contribute to issues related to their work, and feedback in regard to outcomes is promptly relayed to the work team |
| | 1.4 Contributions from internal and external sources are sought and valued in developing and refining new ideas and approaches |

1.5 *Processes* are implemented to ensure that issues raised are resolved promptly or referred to *relevant personnel* as required

**2. Develop trust and confidence**

2.1 All internal and external contacts are treated with integrity, respect and empathy

2.2 *The organisation's social, ethical and business standards* are used to develop and maintain effective relationships

2.3 Trust and confidence of *colleagues, customers and suppliers* is gained and maintained through competent performance

2.4 Interpersonal styles and methods are adjusted to meet the organisation's social and cultural environment

2.5 Other members of the work team are encouraged to follow examples set, according to *organisation's policies and procedures*

**3. Develop and maintain networks and relationships**

3.1 *Networks* are used to identify and build relationships

3.2 Networks and other work relationships are used to provide identifiable benefits for the team and organisation

**4. Manage difficulties into positive outcomes**

4.1 Difficulties are identified and analysed, and action is taken to rectify the situation within the requirements of the organisation and relevant legislation

4.2 Colleagues are guided and supported to resolve work difficulties

4.3 *Workplace outcomes* are regularly reviewed and improved in consultation with relevant personnel

4.4 *Poor work performance* is managed within the organisation's processes

4.5 Conflict is managed constructively within the organisation's processes

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
|---|---|
| **OHS considerations may include:** | • provision of information about OHS legislative requirements, guidelines and the organisation's OHS policies, procedures and programs<br>• OHS practice as an ethical standard and legislative requirement<br>• training of all employees in health and safety procedures and updating of records<br>• changes to work, work practices and the working environment that have an OHS impact<br>• organisation's responsibilities to employees, customers and suppliers<br>• consultations with employees on OHS issues, with consideration given to social and cultural diversity and any special needs |
| *Information* **may be:** | • data appropriate to work roles and organisational policies that is shared and retrieved in writing or verbally, electronically or manually such as:<br>  - policies and procedures<br>  - planning and organisational documents including the outcomes of continuous improvement and quality assurance<br>  - marketing and customer-related data<br>  - archived, filed and historical background data<br>  - individual and team performance data |
| *Consultation processes* **may include:** | • opportunities for all employees to contribute to ideas and information to organisational issues<br>• feedback to the work team and relevant personnel in relation to outcomes of the consultation process |
| *Processes may refer to:* | • participating in planned organisational activities<br>• coordinating surveys or questionnaires<br>• distributing newsletters or reports<br>• conducting informal meetings<br>• informal dialogue with relevant personnel |

| | |
|---|---|
| *Relevant personnel* **may include:** | • managers<br>• supervisors<br>• union representatives/groups<br>• OHS committee and other people with specialist responsibilities<br>• other employees |
| *The organisation's social, ethical and business standards* **may refer to:** | • written standards such as those expressed in:<br> - vision and mission statements<br> - policies<br> - code of workplace conduct/behaviour<br> - dress code<br> - statement of workplace values<br>• implied standards such as honesty and respect relative to the organisation culture and generally accepted within the wider community<br>• standards expressed in legislation and regulations such as anti-discrimination legislation<br>• rewards and recognition for high performing staff |
| *Colleagues, customers and suppliers* **may include:** | • team members<br>• employees at the same level and more senior managers<br>• people from a wide variety of social, cultural and ethnic backgrounds<br>• both internal and external contacts |
| *Organisation's policies and procedures* **may refer to:** | • sets of accepted actions approved by the organisation<br>• organisational tasks and activities undertaken to meet performance outcomes<br>• Standard Operating Procedures<br>• Materials Safety Data Sheets (MSDSs) |
| *Networks* **may be:** | • internal and/or external<br>• informal or formal and with individuals or groups<br>• established structures or unstructured arrangements and may include business or professional associations |
| *Workplace outcomes* **may include:** | • performance of the work team<br>• OHS processes and procedures |

| | |
|---|---|
| ***Poor work performance*** **may refer to:** | • self |
| | • individual team members |
| | • whole work team |
| | • organisation as a whole |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they are able to access, analyse and communicate information and ideas to develop and maintain positive internal and external work relationships; develop trust and confidence within the work team; develop and maintain networks; and resolve problems and conflicts effectively and efficiently.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • the principles and techniques associated with managing work relationships to achieve planning responsibilities: |
| |    - developing trust and confidence |
| |    - maintaining consistent behaviour in work relationships |
| |    - identifying the cultural and social environment |
| |    - identifying and assessing interpersonal styles |
| |    - establishing, building and maintaining networks |
| |    - identifying and resolving problems |
| |    - resolving conflict |
| |    - managing poor work performance |
| |    - monitoring, analysing and introducing ways to improve work relationships |
| |    - contributing to the elimination of discrimination/bias |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| | • functional literacy skills to access and use workplace information |

- skills to research, analyse, interpret and report information
- relationship management and communication skills:
  - responding to unexpected demands from a range of people
  - using supportive and consultative processes effectively
  - forging effective relationships with internal and/or external people and developing and maintaining these networks
  - gaining the trust and confidence of colleagues
  - dealing with people openly and fairly
- coaching and mentoring skills to provide support to colleagues

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| --- | --- |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (2) | • selecting and applying different communication methods to suit different groups and individuals |
| Collecting, analysing and organising information (2) | • collecting and analysing contributions from internal and external sources |
| Planning and organising activities (2) | • organising information and feedback collected from various sources |
| Working in a team (2) | • implementing a range of strategies to facilitate effective workplace relationships |
| Using mathematical ideas and techniques (1) | • using appropriate calculations to aid effective planning |
| Solving problems (2) | • using skills and information to assist in the area of conflict resolution and as an aid to decision making |
| Using technology (2) | • assisting in the management, distribution and communication of information |
| Innovation skills (2) | • adopting new ideas and approaches to develop and maintain networks, effective workplace relationships and effective communication within the work team |

| **Products that could be used as evidence include:** | • documentation produced in managing people within the work team, such as: |
|---|---|
| | - contribution to organisational policies and procedures |
| | - contribution to procedures and policies for dealing with workplace relationships and communications, and related codes of conduct |
| | - actions taken to address social and ethical standards in the workplace |
| | - actions taken to address issues and problems within work team |
| | - actions taken to address methods of maintaining networks and developing contacts within and outside the organisation |
| | - learning and development plans for team members |
| | - materials developed or available for coaching, mentoring and training |
| | - induction programs developed and/or delivered |
| | - actions taken to address internal and external communication processes |
| | - reviews/reports of people management |
| | - advice and input into decisions related to the work team |
| | - records of people management lessons learned |
| | - records of OHS consultation |
| **Processes that could be used as evidence include:** | • how strategies were implemented to ensure that information was collected and accessed |
| | • how ideas and information were communicated |
| | • how communication process was implemented and feedback received and dealt with |
| | • how policies were implemented, and contributions sought and used to develop new ideas and approaches |
| | • how processes were implemented to facilitate new ideas and approaches |
| | • examples of how issues have been resolved |
| | • how the organisation's social and ethical standards have been used within workplace relationships |
| | • how trust and confidence has been developed and maintained |

- how interpersonal styles and methods were adjusted to suit the organisation's social and cultural environment
- examples of how networks were developed and maintained
- how strategic networks were used to build relationships
- how ongoing planning and implementation has been conducted
- how strategies were implemented to ensure that difficulties were addressed and solutions were planned
- how colleagues were guided and supported to resolve work difficulties
- examples of how poor work performance and conflict was managed

**Resource implications for assessment include:**

- access by the learner and trainer to appropriate documentation and resources normally used in the workplace

**Validity and sufficiency of evidence requires:**

- that this unit can be assessed in the workplace or in a closely simulated work environment
- that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment
- that examples of actions taken by candidate to implement effective workplace relationships are provided

**Integrated competency assessment means:**

- that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity

# BSBFLM405B Implement operational plan

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to implement the operational plan by monitoring and adjusting operational performance, producing short-term plans for the department/section, planning and acquiring resources and providing reports on performance as required. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM405A Implement operational plan |
| | Frontline managers are actively engaged in planning activities to achieve the measurable, stated objectives of the team and the organisation. This key role is carried out to provide safe, efficient and effective products and services to customer satisfaction within the organisation's productivity and profitability plans. |
| | At this level, work will normally be carried out within routine and non-routine methods and procedures, which require planning and evaluation and leadership and guidance of others. |
| | This unit builds on BSBFLM305B Support operational plan. Consider co-assessment with BSBFLM412A Promote team effectiveness, BSBFLM406B Implement workplace information system, BSBCMN411A Monitor a safe workplace, and BSBFLM409B Implement continuous improvement. This unit is related to BSBFLM505B Manage operational plan. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Implement operational plan** | 1.1 Details of *resource requirements* are collated, analysed and organised in consultation with *relevant personnel, colleagues and specialist resource managers* |
| | 1.2 *Operational plans* are implemented to contribute to the achievement of the organisation's performance/business plan |
| | 1.3 *Key performance indicators* are identified and used to monitor operational performance |
| | 1.4 *Contingency planning* is undertaken as required |
| | 1.5 *Consultation processes* are undertaken as required |
| | 1.6 ***Assistance in the development and presentation of proposals for resource requirements is provided in line with operational planning processes*** |

| | | |
|---|---|---|
| **2. Implement resource acquisition** | 2.1 | Employees are recruited and inducted within *the organisation's policies, practices and procedures* |
| | 2.2 | Plans for acquisition of physical resources and services are implemented within the organisation's policies, practices and procedures in consultation with relevant personnel |
| **3. Monitor operational performance** | 3.1 | *Performance systems and processes* are monitored to assess progress in achieving profit/productivity plans and targets |
| | 3.2 | Budget and actual financial information is analysed and used to monitor profit/productivity performance |
| | 3.3 | Unsatisfactory performance is identified and prompt action is taken to rectify the situation according to organisational policies |
| | 3.4 | Mentoring, coaching and supervision is provided to support individuals/teams to use resources effectively, economically and safely |
| | 3.5 | Recommendations for variation to operational plans are presented and approved by the *designated persons/groups* |
| | 3.6 | *Systems, procedures and records* associated with performance are implemented in accordance with the organisation's requirements |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations, anti-discrimination and recordkeeping standards and legislation<br>• relevant industry codes of practice |
| **OHS considerations may include:** | • provision of information about OHS legislative requirements, guidelines and the organisation's OHS policies, procedures and programs<br>• OHS practice as an ethical standard and legislative requirement |

- ensuring all employees are effectively trained in health and safety procedures and are regularly updated on OHS systems

- OHS requirements are taken into consideration in the planning process

- ensuring the organisation's OHS systems, procedures and records are regularly updated and reviewed

- organisation's procedures for dealing with hazardous events are regularly updated and reviewed

- key performance indicators include appropriate OHS procedures

**Resource requirements may refer to:**

- human, physical and financial resources — both current and projected

- stock requirements and requisitions

- good and services to be purchased and ordered

**Relevant personnel, colleagues and specialist resource managers may include:**

- managers

- supervisors

- other employees

- colleagues and specialist resource managers

- OHS committees and other people with specialist responsibilities

- people from a wide range of social, cultural and ethnic backgrounds and physical and mental abilities

**Operational plans may refer to:**

- tactical plans developed by the department or section to detail product and service performance

- organisational plans

**Key performance indicators may refer to:**

- measures for monitoring or evaluating the efficiency or effectiveness of a system, and which may be used to demonstrate accountability and to identify areas for improvements

**Contingency planning may refer to:**

- rental, hire purchase or alternative means of procurement of required materials, equipment and stock

- contracting out or outsourcing human resource and other functions or tasks

- restructuring of organisation to reduce labour costs

- strategies for reducing costs, wastage, stock or consumables

- diversification of outcomes

- recycling and re-use

|  |  |
|---|---|
|  | • finding cheaper or lower quality raw materials and consumables |
|  | • seeking further funding |
|  | • increasing sales or production |
|  | • risk identification, assessment and management processes |
|  | • succession planning |
| ***Consultation processes may refer to:*** | • meetings, interviews, brainstorming sessions, email/intranet communications, newsletters or other processes and devices which ensure that all employees have the opportunity to contribute to team and individual operational plans |
|  | • mechanisms used to provide feedback to the work team in relation to outcomes of consultation |
| ***The organisation's policies, practices and procedures may include:*** | • those organisational guidelines which govern and prescribe operational functions, such as the acquisition and management of human and physical resources |
|  | • Standard Operating Procedures |
|  | • undocumented practices in line with organisational operations |
|  | • organisational culture |
| **Performance systems and processes may refer to:** | • formal processes within the organisation to measure performance, such as:  - Key Performance Indicators (KPIs)  - specified work outcomes  - individual and team work plans  - feedback arrangements |
|  | • informal systems used by frontline managers for the work team in the place of existing organisation-wide systems |
| **Designated persons/groups may include:** | • those who have the authority to make decisions and/or recommendations about operations such as workplace supervisors, other managers |
|  | • other affected work groups or teams and groups designated in workplace policies and procedures |
| ***Systems, procedures and records may include:*** | • individual and team performance plans |
|  | • organisational policies and procedures relative to performance |
|  | • databases and other recording mechanisms for ensuring records are kept in line with organisational requirements |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they are able to implement an operational plan. This will include monitoring and adjusting operational performance, producing short-term plans for the department or section, planning and acquiring resources, and providing reports on performance as required.

## Specific Evidence Requirements

| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
|---|---|
| | • the principles and techniques associated with: |
| |    - monitoring and implementing operations and procedures |
| |    - resource planning and acquisition |
| |    - resource management systems at the tactical implementation level |
| |    - relevant budgeting and financial analysis, interpretation and reporting requirements |
| |    - methods for monitoring and reporting on performance |
| |    - problem identification and methods of resolution |
| |    - tactical risk analysis including identification and reporting requirements |
| |    - contingency planning |
| | • alternative approaches to improving resource usage and eliminating resource inefficiencies and waste |
| | • alternative approaches to mentoring and coaching individuals and teams who have difficulty in performing to the required standard |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| | • functional literacy skills to access and use workplace information and to prepare reports |

- skills to:
  - monitor and maintain a safe workplace and environment
  - access and use feedback to improve operational performance
  - prepare recommendations to improve operations
  - access and use established systems and processes
- coaching and mentoring skills to provide support to colleagues

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| --- | --- |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (2) | • sharing information with team on strategies and processes for implementation'<br>• providing feedback to team members on work performance |
| Collecting, analysing and organising information (2) | • acquiring information for monitoring and reporting purposes, and to aid in the implementation of the operational plan |
| Planning and organising activities (2) | • planning the acquisition of physical and human resources<br>• allocating work within the team |
| Working in a team (2) | • working cooperatively with team to achieve planned outcomes |
| Using mathematical ideas and techniques (1) | • carrying out calculations associated with resource usage and analysing and monitoring budget and financial plans |
| Solving problems (2) | • monitoring and implementing contingency plans to address unsatisfactory performance in all areas of the operation |
| Using technology (2) | • using technology to track, monitor and report on implementation of operating plan |
| Innovation skills (2) | • creating innovative methods to achieve planned outcomes |

| | |
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| **Products that could be used as evidence include:** | • documentation produced while implementing the operational plan, such as: |
| |    - variations to operational plan |
| |    - rosters and staff allocation |
| |    - resource acquisition planning |
| |    - actions taken to address resource shortfalls |
| |    - monitoring of financial plans and budgets |
| |    - contingency planning |
| |    - risk management |
| |    - learning and development plans for team members |
| |    - materials developed for coaching, mentoring and training |
| |    - induction programs developed and/or delivered |
| |    - actions taken to address poor, unsafe or excellent performance |
| |    - actions taken to address issues and problems within work team |
| |    - reviews of people management |
| |    - advice and input into management decisions related to the operational plan |
| |    - records of people management lessons learned |
| **Processes that could be used as evidence include:** | • how the operational plan was implemented |
| | • how contingency plan was implemented |
| | • how work has been allocated within the work team, and the rationale for allocations |
| | • how team members were recruited, guided and supported in performing their role including the induction process for new team members |
| | • how performance systems and process were monitored |
| | • how the budget and financial information were analysed and used |
| | • how the performance management system was implemented and/or monitored within work team |
| | • examples of how consultation processes were conducted |
| | • how problems and issues within the work team have been addressed |
| | • how input and advice was provided to management in relation to human resource management |

|  |  |
|---|---|
| | • how own people management processes have been reviewed and evaluated, and improvements identified, reported and acted upon |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
| | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • that examples of actions taken by candidate to implement the operational plan are provided |
| **Integrated competency assessment means:** | • this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM406B Implement workplace information system

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|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to implement the workplace information system. It involves the identification, acquisition, initial analysis and use of appropriate information which plays a significant part in the organisation's effectiveness. |
| **Competency Field** | *Business management services* |
| **Domain** | *Frontline management* |
| **Application of the Competency** | This unit replaces BSBFML406A Implement workplace information system. |
| | Frontline managers, in identifying, acquiring, analysing and using appropriate information, play a significant role in contributing to the organisation's effectiveness. |
| | At this level, work will normally be carried out within routine and non-routine methods and procedures which require planning and evaluation, leadership and guidance of others, and some discretion and judgement. |
| | This unit builds on BSBFLM306B Provide workplace information and resourcing plans**.** Consider co-assessment with BSBFLM405B Implement operational plan, BSBFLM409B Implement continuous improvement, BSBFLM412A Promote team effectiveness, BSBCMN410A Coordinate implementation of customer service strategies and BSBCMN411A Monitor a safe workplace. This unit is related to BSBFLM506B Manage workplace information systems. |

## Element

Elements define the critical outcomes of a unit of competency.

## Performance Criteria

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement.

**1. Identify and source information needs**

1.1 *Information* required by teams is determined and found

1.2 Information held by the organisation is acquired and reviewed to determine suitability, accessibility, currency and reliability according to *organisational policies*

1.3 *Plans* are prepared and implemented to obtain information which is not immediately available or accessible

**2. Collect, analyse and report information**

2.1 Collection of information is timely, and is adequate and relevant to the needs of teams

2.2 Information is in a format suitable for analysis, interpretation and dissemination

| | 2.3 | Information is analysed to identify and report relevant trends and developments in terms of the needs for which it was acquired |
|---|---|---|
| **3. Implement information systems** | 3.1 | Management information systems are implemented effectively to store, retrieve and regularly review data for decision making purposes |
| | 3.2 | *Technology* available in the work area is used to manage information effectively |
| | 3.3 | Recommendations for improving the information system are submitted to *designated persons and/or groups* |
| **4. Prepare business plan/budgets** | 4.1 | Teams are involved in *business plans and/or budget* preparation in a way which uses their contribution effectively and contributes to gaining support for the outcomes |
| | 4.2 | Business plans and/or budgets are presented and prepared in accordance with the organisation's guidelines and requirements |
| | 4.3 | *Contingency plans* are implemented in the event that alternative action is required |
| **5. Prepare resource proposals** | 5.1 | *Resource* planning data is collected in consultation with *colleagues*, including those who have a specialist role in resource management |
| | 5.2 | Estimates of resource needs and use reflect the organisation's business plans, and customer and supplier requirements |
| | 5.3 | Proposals to secure resources are supported by clearly presented submissions describing realistic options, benefits, costs and outcomes |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations, anti-discrimination and recordkeeping standards and legislation |
| | • relevant industry codes of practice |

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| **OHS considerations include:** | • provision of information about OHS legislative requirements, guidelines and the organisation's OHS policies, procedures and programs including arrangements for reporting hazards to management |
| | • health and safety procedures at the workplace relevant to employees, including the use and maintenance of risk control measures |
| | • information on how employees can access health and safety information |
| | • inclusion of OHS in business plans |
| | • inclusion of OHS in resource proposals |
| *Information* **may include:** | • data shared and retrieved in various forms such as in writing or verbally, electronically or manually |
| | • policies and procedures |
| | • planning and organisational documents |
| | • organisational performance data |
| | • financial and contractual data |
| | • marketing and customer-related data |
| | • continuous improvement and quality assurance data |
| | • archived, filed and historical background data |
| | • data available internally or externally |
| **Organisational policies may include:** | • guidelines for decision making throughout the organisation that link the formulation of strategy with its implementation |
| | • sets of accepted actions approved by the organisation |
| | • Standard Operating Procedures |
| *Plans* **may refer to:** | • an informal document outlining a series of planned actions or steps |
| | • action plans, project plans or more formal planning tools in line with organisational procedures |
| *Technology* **may include:** | • computerised systems and software such as databases, project management and word-processing |
| | • telecommunications devices |
| | • any other technology used to carry out work roles and responsibilities |
| **Designated persons and/or groups may include:** | • managers or supervisors whose have management roles and responsibilities concerning information systems |

- other work groups or teams whose work will be affected by the system
- groups designated in workplace policies and procedures
- other stakeholders accessing the information system such as customers and service providers

**Business plans and/or budgets may refer to:**

- long-term budgets/plans
- short-term budgets/plans
- operational plans
- spreadsheet-based financial projections
- cash flow projections
- targets or Key Performance Indicators (KPIs) for production, productivity, wastage, sales, income and expenditure

**Contingency plans may include:**

- rental, hire purchase or alternative means of procurement of required materials, equipment and stock
- contracting out or outsourcing human resource and other functions or tasks
- restructuring of organisation to reduce labour costs
- strategies for reducing costs, wastage, stock or consumables
- diversification of outcomes
- recycling and re-use
- finding cheaper or lower quality raw materials and consumables
- seeking further funding
- increasing sales or production
- risk identification, assessment and management processes

***Resource* may include:**

- people
- power/energy
- information
- finance
- buildings/facilities
- equipment
- technology
- time
- targets or Key Performance Indicators (KPIs) for production, productivity, wastage, sales, income and expenditure

***Colleagues* may include:**

- team members

- employees at the same level or more senior managers
- OHS committee members and other specialists
- people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they are able to effectively implement the workplace information system by demonstrating that they are able to access and use workplace information to facilitate business operations; and prepare information for financial and resource plans/proposals.

## Specific Evidence Requirements

| **Required knowledge and understanding include:** | <ul><li>relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination</li><li>the principles and techniques associated with:<br><br>workplace information systems<br><br>tactical plans and budgets<br><br>resource proposals</li><li>the basic financial concepts in tactical plans and budgets</li><li>the methods to gain efficiencies in resource management</li></ul> |
|---|---|
| **Required skills and attributes include:** | <ul><li>ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities</li><li>functional literacy skills to access and use workplace information</li><li>communication skills</li><li>research skills including:<ul><li>information collection, analysis, interpretation and reporting</li><li>identifying corporate information resources</li><li>identifying tactical and operational information requirements of the team</li></ul></li></ul> |

- information management skills

- information presentation skills

- skills to improve information usage in decision making

- coaching and mentoring skills to provide support to colleagues

- technology skills to extract/input/present information

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
|---|---|
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (2) | <ul><li>identifying information needs with the work team</li><li>seeking the contribution of others in preparing a business plan or budget</li><li>providing feedback on information and contributions provided</li></ul> |
| Collecting, analysing and organising information (2) | <ul><li>collecting data</li><li>using the management information system to store and retrieve information</li><li>submitting information in an appropriate format</li></ul> |
| Planning and organising activities (2) | <ul><li>planning the timing and methods of information collection</li><li>organising meetings to discuss results and outcomes</li></ul> |
| Working in a team (2) | <ul><li>utilising team strategies to maximise effective of work to be done</li></ul> |
| Using mathematical ideas and techniques (1) | <ul><li>using appropriate techniques to aid data collection and to make budget calculations</li></ul> |
| Solving problems (2) | <ul><li>contributing to contingency planning</li></ul> |
| Using technology (1) | <ul><li>using technology to assist the management of information</li></ul> |
| Innovation skills (2) | <ul><li>developing an innovative approach to the implementation of the information system to enhance business operations</li></ul> |
| **Products that could be used as evidence include:** | <ul><li>documentation produced in implementing workplace information systems, such as:</li></ul> |

- contribution to organisational policies and procedures
- contribution to procedures and policies for dealing with information management systems, and related codes of conduct
- actions taken to address information collection and retrieval in the workplace
- actions taken to address methods of analysing information and implementing an information system
- actions taken to address internal and external information management issues
- learning and development plans
- materials developed for coaching, mentoring and training
- induction programs developed and/or delivered
- actions taken to address issues and problems within work team
- reviews of people management
- advice and input into management decisions related to the management information system
- records of people management lessons learned

| | |
|---|---|
| **Processes that could be used as evidence include:** | • how information needs were determined and information was collected within the work team |
| | • how information held by the organisation was acquired, analysed and reviewed |
| | • examples of procedures implemented to obtain information which is not readily available |
| | • how procedures have been implemented to ensure that information is collected in a suitable format, a time efficient manner and how accuracy and adequacy has been controlled |
| | • how the information system was implemented |
| | • examples of how information was used, especially with the utilisation of technology |
| | • examples of how recommendations for improvement were encouraged and acknowledged |
| | • how the work team was involved in the preparation of business plans and budgets |
| | • how estimates of resource needs were planned and resource requirements are processed |
| | • examples of contingency plan |

| | |
|---|---|
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
| | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • that examples of actions taken by candidate to implement the workplace information system are provided |
| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM409B Implement continuous improvement

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to implement the organisation's continuous improvement systems and processes. Particular emphasis is on using systems and strategies to actively encourage the team to participate in the process, monitoring and reviewing performance, and identifying opportunities for further improvements. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM409A Implement continuous improvement. |
| | Frontline managers have an active role in implementing the continuous improvement process in achieving the organisation's objectives. Their position, closely associated with the creation and delivery of products and services, means that they have an important responsibility in influencing the ongoing development of the organisation. |
| | At this level, work will normally be carried out within routine and non-routine methods and procedures, which require planning and evaluation, and leadership and guidance of others. |
| | This unit builds on BSBFLM309A Support continuous improvement systems and processes. Consider co-assessment with BSBFLM405B Implement operational plan, BSBCMN411A Monitor a safe workplace, BSBCMN412A Promote innovation and change and BSBFLM412A Promote team effectiveness. This unit is related to BSBFLM509B Facilitate continuous improvement. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Implement continuous improvement systems and processes** | 1.1 *Systems* are implemented to ensure that individuals and teams are actively encouraged and supported to *participate in decision making processes*, assume responsibility and exercise initiative |
| | 1.2 The organisation's *continuous improvement processes* are communicated to individuals and teams, and feedback is obtained |
| | 1.3 Effective *mentoring and coaching* ensures that individuals and teams are able to implement the organisation's continuous improvement processes |

| **2. Monitor and review performance** | 2.1 | The organisation's systems and *technology* are used to monitor and review progress and to identify ways in which planning and operations could be improved |
| | 2.2 | *Customer service* is improved through continuous improvement techniques and processes |
| | 2.3 | Recommendations for adjustments are formulated and communicated to those who have a role in their development and implementation |
| **3. Implement opportunities for further improvement** | 3.1 | *Processes* are implemented to ensure that team members are informed of savings and productivity/ service improvements in achieving the business plan |
| | 3.2 | Work performance is documented to aid the identification of further opportunities for improvement |
| | 3.3 | Records, reports and recommendations for improvement are managed within the organisation's systems and processes |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations, anti-discrimination and record keeping standards and legislation |
| | • relevant industry codes of practice |
| **OHS considerations may include:** | • provision of information about OHS legislative requirements, guidelines and the organisation's OHS policies, procedures and programs |
| | • OHS practice as an ethical standard and legislative requirement |
| | • training of all employees in health and safety procedures, and updating of records |
| | • requirements of OHS legislation related to delegation and reporting |

|  | • implementation and monitoring of the continuous improvement processes of any OHS management system |
|---|---|
| ***Systems may refer to:*** | • organisation policies and procedures |
|  | • web based communication devices |
|  | • forums, meetings |
|  | • newsletters and reports |
| ***Participate in decision making processes* may include:** | • processes which ensures that all employees have the opportunity to contribute to organisational issues |
|  | • feedback in relation to outcomes of the consultative process |
| ***Continuous improvement processes* may include:** | • policies and procedures which allow an organisation to systematically review and improve the quality of its products, services and procedures |
|  | • cyclical audits and reviews of workplace, team and individual performance |
|  | • seeking and considering feedback from a range of stakeholders |
|  | • modifications and improvements to systems, processes, services and products |
|  | • evaluations and monitoring of effectiveness |
| ***Mentoring and coaching* may refer to:** | • teaching another member of the team, usually focusing on a specific work task or skill |
|  | • providing feedback, support and encouragement on a range of matters |
|  | • providing assistance with problem solving |
| ***Technology* may include:** | • computerised systems and software such as databases, project management and word-processing |
|  | • telecommunications devices |
|  | • any other technology used to carry out work roles and responsibilities |
| ***Customer service* may be:** | • internal or external |
|  | • to existing, new or potential clients |
| ***Processes may refer to:*** | • team meetings |
|  | • email/intranet, newsletters or other communication devices |
|  | • newsletters and bulletins |
|  | • staff reward mechanisms |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they are able to implement, monitor and adjust plans, processes and procedures to improve performance; they must also be able to support others to implement the continuous improvement system/processes, and be able to identify and report opportunities for further improvement.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • the principles and techniques associated with: |
| |    - continuous improvement systems and processes |
| |    - benchmarking |
| |    - best practice |
| |    - the quality approaches which the organisation may implement |
| |    - the methods that can be used in continuous improvement |
| |    - the organisation's recording, reporting and recommendation processes to facilitate continuous improvement |
| |    - change management |
| | • the benefits of continuous improvement |
| | • the barriers to continuous improvement |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| | • functional literacy skills to access and use workplace information |
| | • communication skills to: |
| |    - gain the commitment of individuals and teams to continuous improvement |
| |    - deal with people openly and fairly |
| |    - use consultation skills effectively |

- research, analysis, interpretation and reporting skills
- monitoring and evaluation skills
- skills to consolidate opportunities for improvement
- coaching and mentoring skills to provide support to colleagues

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| | Level (1) represents the competence to undertake tasks effectively Level (2) represents the competence to manage tasks Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (2) | • liaising with individuals and work team to improve the organisation's continuous improvement processes <br> • communicating the organisation's continuous improvement systems and processes <br> • ensuring the effective coaching and mentoring of team members is provided |
| Collecting, analysing and organising information (2) | • analysing data related to progress and improvement <br> • organising information in such a way that it is accessible to team members <br> • making recommendations for adjustments to systems and processes |
| Planning and organising activities (2) | • planning customer service improvements |
| Working in a team (2) | • encouraging team members to participate in decision making processes <br> • obtaining team feedback on further improvement initiatives |
| Using mathematical ideas and techniques (1) | • completing calculations for work improvement |
| Solving problems (2) | • implementing the organisation's continuous improvement processes, and investigating problems with introducing improvements |
| Using technology (2) | • using technology to assist the management of information to aid the continuous improvement |

| | |
|---|---|
| Innovation skills (2) | • developing an innovative approach to the implementation of the continuous improvement system to enhance business operations |
| **Products that could be used as evidence include:** | • documentation produced in implementing continuous improvement, such as: |

- contribution to organisational policies and procedures
- contribution to procedures and policies for dealing with continuous improvement processes, and relevant codes of conduct
- actions for information collection, analysis and retrieval
- learning and development plans
- materials developed for coaching, mentoring and training
- induction programs developed and/or delivered
- actions taken to address internal and external information management issues
- actions taken to address issues and problems
- reviews of people management
- advice and input into management decisions related to continuous improvement
- records of people management lessons learned

**Processes that could be used as evidence include:**

- how strategies have been implemented to encourage team members to participate in the decision making process
- examples of how continuous improvement processes were communicated to all stakeholders
- examples of coaching and mentoring used to support continuous improvement processes
- how technology was used to monitor operational progress
- recommendations for adjustments that have been made
- how team members were informed of improvements/innovations
- how work performance was documented to aid identification of further opportunities for improvement
- how future planning has included areas which have recorded improvements

| | |
|---|---|
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
| | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • that examples of actions taken by candidate to implement continuous improvement are provided |
| **Integrated competency assessment means:** | • this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM412A Promote team effectiveness

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required of frontline managers to promote teamwork. It involves developing team plans to meet expected outcomes, leading the work team, and proactively working with the management of the organisation. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM402A Show leadership in the workplace and BSBFLM404A Lead work teams, which have been combined to create this unit. |
| | Frontline managers have an important leadership role in the development of efficient and effective work teams. They play a prominent part in team planning, supervising the performance of the team and developing team cohesion by providing leadership for the team and forming the bridge between the management of the organisation and the team members. |
| | At this level, work will normally be carried out within both routine and non-routine methods and procedures which require planning and evaluation, and leadership and guidance of others. |
| | This unit builds on BSBFLM312A Contribute to team effectiveness and is related to BSBFLM512A Ensure team effectiveness |

## Element

Elements define the critical outcomes of a unit of competency.

## Performance Criteria

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement.

**1. Plan to achieve team outcomes**

1.1 *Team purpose, roles, responsibilities, goals, plans and objectives* are identified, established and documented in *consultation* with team members

1.2 Team members are supported in meeting expected outcomes

**2. Develop team cohesion**

2.1 Opportunities are provided for input of team members into planning, decision making and operational aspects of work team

2.2 Team members are encouraged and supported to take *responsibility for own work* and to assist each other in undertaking required roles and responsibilities

2.3 *Feedback* is provided to team members to encourage, value and reward individual and team efforts and contributions

| | 2.4 | Issues, concerns and problems identified by team members are recognised and addressed or referred to *relevant persons* as required |
|---|---|---|
| **3. Participate in and facilitate work team** | 3.1 | Team members are actively encouraged to participate in and take responsibility for team activities and communication processes |
| | 3.2 | The team is given support to identify and resolve problems which impede its performance |
| | 3.3 | Own contribution to work team serves as a role model for others and enhances the organisation's image within the work team, the organisation and with clients/customers |
| **4. Liaise with management** | 4.1 | *Communication* with *line manager/management* is kept open at all times |
| | 4.2 | Information from line manager/management is communicated to the team |
| | 4.3 | Unresolved issues, concerns and problems raised by the team/team members are communicated to line manager/management and followed up to ensure action is taken |
| | 4.4 | Unresolved issues, concerns and problems related to the team/team members raised by line managers/management are communicated to the team and followed up to ensure action is taken |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations, anti-discrimination and record keeping standards and legislation<br>• relevant industry codes of practice |
|---|---|
| **OHS considerations may include:** | • provision of information about OHS legislative requirements, guidelines and the organisation's OHS policies, procedures and programs<br>• OHS practice as an ethical standard and legislative requirement |

| | |
|---|---|
| | • training of all employees in health and safety procedures, and updating of records |
| *Team purpose, roles, responsibilities, goals, plans and objectives* **may include:** | • goals for individuals and the work team<br>• expected outcomes and outputs<br>• individual and team performance plans and Key Performance Indicators (KPIs)<br>• action plans, business plans and operational plans linked to strategic plans<br>• OHS responsibilities |
| *Consultation* **may refer to:** | • attending meetings, interviews, brainstorming sessions and using email/intranet communications, newsletters or other processes and devices which ensure that all employees have the opportunity to contribute to team and individual effectiveness<br>• using mechanisms used to provide feedback to the work team in relation to outcomes of consultation |
| *Responsibility for own work* **may involve:** | • individuals and teams<br>• individual and joint actions |
| *Feedback may refer to:* | • informal communication of ideas and thoughts on specific tasks, outcomes, decisions, issues or behaviours<br>• formal/informal gatherings between team members where there is communication on work related matters |
| *Relevant persons* **may include:** | • frontline manager's direct superior or other management representatives<br>• colleagues<br>• OHS committees and other people with specialist responsibilities |
| *Communication* **may include:** | • verbal, written or electronic communication<br>• face-to-face<br>• formal/informal interaction |
| *Line manager/management* **may refer to:** | • frontline manager's direct superior or other management representatives |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they are able to demonstrate leadership in developing and implementing plans, in leading and facilitating teamwork and in actively liaising with management. They must also provide evidence that teamwork is actively promoted, supported and encouraged within the work team; and their own performance serves as a role model for others and enhances the organisation's image.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding includes:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • organisational policies and procedures |
| | • organisational goals, objectives and plans |
| | • organisational structure, including organisational chart |
| | • the principles and techniques associated with: |
| |    - leadership |
| |    - delegation and work allocation |
| |    - group dynamics and processes |
| |    - motivation |
| |    - goal setting |
| |    - planning |
| |    - negotiation |
| |    - individual behaviour and difference |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| | • communication skills |
| | • basic training skills, including mentoring and coaching |
| | • planning and organising skills |
| | • problem solving skills |
| | • leadership skills |
| | • group facilitation skills |
| | • attributes: |
| |    - empathic |
| |    - communicative |

- showing positive leadership
- self-aware
- supportive
- trusting
- open
- flexible
- accommodating
- initiating
- loyal
- recognising achievement
- fair
- adaptable
- assertive
- persuasive

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
|---|---|
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (2) | • communicating verbally to lead a team including negotiating, basic training, conducting meetings, questioning and discussing<br><br>• communicating in writing, including report writing, communicating with management, identifying issues and concerns in writing |
| Collecting, analysing and organising information (2) | • maintaining currency of own knowledge and skills and that of team members relevant to organisation planning<br>• undertaking analysis following planning activities<br>• using data collection and analysis for monitoring and review |
| Planning and organising activities (2) | • planning for own work and that of team members including delegation and work allocation |
| Working in a team (2) | • working with team members and providing leadership to team<br><br>• working with line manager/management to represent team interests |

| | |
|---|---|
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation relevant to work of team, including financial data |
| Solving problems (2) | • applying problem solving skills as required to address problems arising in leading team |
| Using technology (1) | • using word processing packages, spreadsheets, databases, and other packages to produce written correspondence and reports related to operations and leadership of team<br>• understanding assistive technologies, as necessary |
| Innovation skills (2) | • developing an innovative approach to the implementation of strategies to improve team effectiveness |

**Products that could be used as evidence include:**

- documentation produced in managing people within the work team, such as:
  - reports
  - minutes or records of meetings
  - work journals or diaries
  - records of actions taken to address issues raised by team members

**Processes that could be used as evidence include:**

- how communication process has been managed and how processes have been implemented to ensure that consultation takes place
- examples of how team members were supported and encouraged to meet expected outcomes
- examples of strategies which have been developed to develop and facilitate team cohesion
- how performance plan was implemented
- how team members were guided and supported in performing their role, including induction process for new team members
- how performance management system was implemented within work team
- how problems and issues within the work team were addressed
- how input and advice was provided to management in relation to human resource management of the work team
- how own people management processes were reviewed and evaluated, improvements identified, reported and acted upon

| | |
|---|---|
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
| | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • that examples of actions taken by candidate to promote team effectiveness are provided |
| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM501B Manage personal work priorities and professional development

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to manage own performance and professional development. Particular emphasis is on setting and meeting priorities, analysing information and using strategies to develop further competence. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM501A Manage personal work priorities and professional development. |
| | Frontline managers are responsible for managing their own performance and professional development. |
| | At this level, work will normally be carried out within complex and diverse methods and procedures, which require the exercise of considerable discretion and judgement using a range of problem solving and decision making strategies. |
| | This unit builds on BSBCMN402A Develop work priorities. Consider co-assessment with BSBFLM506B Manage workplace information systems, BSBFLM511B Develop a workplace learning environment and BSBFLM512A Ensure team effectiveness. |

## Element

Elements define the critical outcomes of a unit of competency.

## Performance Criteria

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement.

**1. Establish personal work goals**

1.1 Personal work planning and organisation serve as a positive role model in the workplace

1.2 Personal work goals, plans and activities reflect the organisation's plans, and *own responsibilities and accountabilities*

1.3 Individual initiative is taken to achieve and extend personal work goals beyond those planned

1.4 Personal performance is measured and maintained in varying work conditions, work contexts and contingencies

**2. Set and meet own work priorities**

2.1 Initiative is taken to prioritise and facilitate competing demands to achieve personal, team and the organisation's goals and objectives

2.2 *Technology* is used efficiently and effectively to manage work priorities and commitments

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**3. Develop and maintain professional competence**

</td><td>

3.1 Personal knowledge and skills are assessed against *competency standards* to determine development needs, priorities and plans

3.2 Feedback from employees, *clients and colleagues* is sought and used to identify and develop ways to improve competence

3.3 *Development opportunities* suitable to personal learning style(s) are identified, evaluated, selected and used to develop competence

3.4 Participation in networks is undertaken to enhance personal knowledge, skills and work relationships

3.5 New skills are identified and developed to achieve and maintain a competitive edge

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## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

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**Legislation, codes and national standards relevant to the workplace may include:**

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- award and enterprise agreements and relevant industrial instruments
- relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination
- relevant industry codes of practice

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**OHS considerations may include:**

</td><td>

- knowledge of OHS legislation, principles and practice within the context of the organisation's operations and plans
- OHS practice as an ethical standard and legislative requirement
- training of all employees in health and safety procedures, and updating of records
- inclusion of OHS in personal work priorities within the context of the organisation
- adjustment of communication and OHS approach to cater for social and cultural diversity and special needs

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*Own responsibilities and accountabilities* **may include:**

</td><td>

- a statement of conduct outlining an individual's responsibilities/actions/performance
- outputs as expressed in position descriptions or duty statements
- expectations of workplace performance as expressed in a performance plan

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</table>

| *Technology* may include: | • computerised systems and software such as databases, project management and word-processing |
| | • telecommunications devices |
| | • any other technology used to carry out work roles and responsibilities |

| *Competency standards* may include: | • nationally endorsed units of competency consistent with work requirements of the diploma |
| | • enterprise-specific units of competency consistent with work requirements of the diploma |

| *Clients and colleagues* may be: | • internal or external customers |
| | • team members |
| | • colleagues at the same level and more senior managers |
| | • people from a wide range of social, cultural and ethnic backgrounds and physical and mental abilities |

| *Development opportunities* may include: | • induction |
| | • mentoring |
| | • action learning |
| | • coaching |
| | • shadowing |
| | • exchange/rotation |
| | • structured training programs |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they have the competencies to prepare personal work plans and establish personal work priorities. They must be able to show evidence of the ability to assess their own performance and to identify and act on their own professional development needs.

## Specific Evidence Requirements

| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • the principles and techniques involved in the management and organisation of: |

- personal goal setting
- performance measurement
- time management
- personal behaviour, self-awareness and personality traits identification
- personal development plan
- the organisation's policies, plans and procedures
- the types of work methods and practices which can improve personal performance
- the types of learning style(s) and how they relate to the individual
- the management development opportunities and options for self

**Required skills and attributes include:**

- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
- functional literacy skills to interpret written and oral information about workplace requirements
- communication skills, including receiving and analysing feedback and reporting
- a range of skills to support work management and development:
  - researching information to develop personal and work plans
  - eliciting, analysing and interpreting feedback
  - analysing culturally different viewpoints and taking them into account in personal and work plans
  - monitoring workplace trends related to work role and responsibilities
  - using information systems to assist establish work plans
  - assessing the effectiveness of own management development
  - developing and maintaining professional networks

**Key competencies or generic skills relevant to this unit**

The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:

Level (1) represents the competence to undertake tasks effectively
Level (2) represents the competence to manage tasks
Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

The bulleted points provide examples of how the key competencies can be applied for this unit.

| | |
|---|---|
| Communicating ideas and information (3) | • consulting with members of work team and professional networks to obtain feedback to identify and develop ways to improve competence |
| Collecting, analysing and organising information (3) | • measuring self-performance and developing work plan |
| Planning and organising activities (3) | • developing work plan and setting own priorities |
| Working in a team (3) | • using professional networks to aid professional development and to obtain feedback |
| Using mathematical ideas and techniques (1) | • using these as an aid to measure and plan personal goals |
| Solving problems (3) | • addressing problems related to achievement of work and development plans |
| Using technology (3) | • using technology to aid effective communication and aid development of plan |
| Innovation skills (3) | • developing and using innovative approaches to the development of personal skill development and goal setting |
| **Products that could be used as evidence include:** | • documentation produced in managing personal work priorities and professional development, such as: |

- contribution to organisational policies and procedures
- procedures and policies for professional development, and related codes of conduct
- actions taken to address professional development, information collection and retrieval
- actions taken to address methods of analysing information and developing and/or maintaining a professional development information system
- learning and development plans for self
- actions taken to address internal and external information management issues
- reviews of people management
- advice and input into management decisions related to professional development

| | |
|---|---|
| **Processes that could be used as evidence include:** | • how personal work planning and allocation has been managed |

|  |  |
|---|---|
|  | • examples of how individual initiative has been used and personal work goals have been extended |
|  | • how personal performance has been measured |
|  | • examples of how initiative has been taken to prioritise and facilitate competing demands to achieve goals and objectives |
|  | • how technology has been used to manage work priorities |
|  | • how personal knowledge and skills have been assessed |
|  | • how feedback has been sought from employees, clients and colleagues and acted on to develop improved competence |
|  | • how individual learning and development pathways have been developed |
|  | • how new skills have been identified and developed to gain a competitive edge |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
|  | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • that examples of actions taken by the candidate to manage personal work priorities and professional development are provided |
| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM503B Manage effective workplace relationships

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to manage effective workplace relationships with particular regard to communication and representation. This involves analysing and communicating information, establishing systems to develop and maintain effective working relationships and networks, and implementing strategies to overcome difficulties. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM503A Establish effective workplace relationships. |
| | Frontline managers play an important role in developing and maintaining positive relationships in internal and external environments so that employees, customers, suppliers and the organisation achieve planned outputs and outcomes. They play a prominent part in motivating, mentoring, coaching and developing team cohesion through providing leadership for the team and forming the bridge between the management of the organisation and the team members. |
| | At this level, work will normally be carried out within complex and diverse methods and procedures, which require the exercise of considerable discretion and judgement using a range of problem solving and decision making strategies. |
| | This unit builds on BSBFLM403B Implement effective workplace relationships. Consider co-assessment with BSBFLM512A Ensure team effectiveness. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Manage information and ideas** | 1.1 *Strategies and processes* are put in place to ensure that *information* associated with the achievement of work responsibilities is collected from appropriate *sources* and communicated to all stakeholders |
| | 1.2 *Strategic planning* and *operational planning* is conducted to ensure that communication of ideas and information is appropriate to the audience and is sensitive to social and cultural diversity and any special needs |

1.3 *Consultation processes* are developed and/or implemented to ensure that employees have the opportunity to contribute to issues related to their work and that feedback on outcomes of the consultation process is received

1.4 *Policies* are established and/or implemented to ensure that contributions from internal and external sources are sought and valued in developing and refining new ideas and approaches

1.5 *Processes and procedures* are developed and/or implemented to ensure that issues raised are resolved promptly or referred to *relevant personnel* as required

**2. Establish systems to develop trust and confidence**

2.1 Policies are established and/or implemented to ensure that people are treated with integrity, respect and empathy, and that the *organisation's social, ethical and business standards* are used to develop and maintain effective relationships

2.2 Trust and confidence of *employees, colleagues, customers and suppliers* is gained and maintained through competent performance

2.3 Own interpersonal styles and methods are adjusted to the organisation's social and cultural environment and members of the work team are guided and supported in their personal adjustment process

**3. Manage the development and maintenance of networks and relationships**

3.1 Strategic *networks* and other work relationships are used to identify and build relationships to provide identifiable benefits for the team and for the organisation

3.2 Ongoing planning and implementation are conducted to ensure that effective workplace relationships are developed and maintained

**4. Implement strategies to manage difficulties to achieve positive outcomes**

4.1 Strategies are developed and/or implemented to ensure that difficulties are identified and analysed, and that an action plan is developed to rectify the situation in accordance with organisational requirements and relevant legislation

4.2 *Guidance, counselling and support* are extended to colleagues in their efforts to resolve work difficulties

4.3 Processes to ensure the identification and management of poor work performance are developed and managed within the organisation's processes

4.4 Processes and systems are established to ensure that conflict is identified and managed constructively within the organisation's processes

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| **OHS considerations may include:** | • knowledge of OHS legislation, principles and practice within the context of the organisation's operations and plans<br>• OHS practice as an ethical standard and legislative requirement<br>• training of all employees in health and safety procedures, and updating of records<br>• organisation's responsibilities to customers and suppliers<br>• adjustment of communication and OHS approach to cater for social and cultural diversity and special needs |
| ***Strategies and processes* may include:** | • long-term or short-term plans factoring in opportunities for team input<br>• individual and team performance plans<br>• clarification of roles and expectations<br>• questionnaires, surveys, interviews<br>• policies and procedures<br>• training and development activities<br>• communication devices, such as intranet and email communication systems, newsletters, reports |
| ***Information* may be:** | • data appropriate to work roles and organisational policies that is shared and retrieved in writing or verbally, electronically or manually such as:<br>   - policies and procedures |

|  | - planning and organisational documents including the outcomes of continuous improvement and quality assurance |
|--|--|
|  | - marketing and customer-related data |
|  | - archived, filed and historical background data |
|  | - individual and team performance data |

| *Sources* **may be:** | • internal or external customers such as: |
|--|--|
|  |     - supervisors |
|  |     - team members |
|  |     - fellow frontline managers |
|  |     - clients, purchasers of services |
|  |     - contractors |
|  | • in print format such as team reports |
|  | • non-print including verbal reports |
|  | • annotated performance plans |
|  | • productivity, data outputs and inputs |
|  | • human resource information such as rates of absenteeism and workplace participation data |

| *Strategic planning* **may refer to:** | • formal processes for determining the organisation's strategic direction and strategies for achieving it within the context of the organisation's strategic plan including: |
|--|--|
|  |     - research of the internal and external environment including scenario planning, forecasting, looking over the horizon, risk analysis, market analysis, review of performance indicators and data analysis |
|  |     - consultation through mechanisms such as focus groups, interviews, surveys, questionnaires, meetings |

| *Operational planning* **may refer to:** | • processes to develop plans for specific tactical responses to the marketplace and the day-to-day plans associated with the production and delivery of a service or product including: |
|--|--|
|  |     - review of performance indicators and data analysis |
|  |     - consultation through mechanisms such as focus groups, interviews, surveys, questionnaires, invitations to respond to drafts, team and operational meetings |

| | |
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| ***Consultation processes*** <br> **may include:** | • the development or implementation of a process which ensures that all employees have the opportunity to contribute to workplace issues <br> • feedback to the work team in relation to outcomes of the consultation process |
| ***Policies may refer to:*** | • organisational guidelines and systems that govern operational functions <br><br> • statements of commitment to action <br><br> • frameworks |
| ***Processes and procedures*** <br> **may include:** | • sets of accepted actions approved by the organisation <br> • organisational tasks and activities undertaken to meet performance outcomes <br> • Standard Operating Procedures <br> • Materials Safety Data Sheets |
| ***Relevant personnel*** <br> **may include:** | • managers <br> • supervisors <br> • other employees <br> • union representatives/employee groups <br> • Board members <br> • OHS committees and other people with specialist responsibilities |
| ***The organisation's social, ethical and business standards*** <br> **may refer to:** | • written standards such as those expressed in: <br>   - vision and mission statements <br>   - policies <br>   - code of workplace conduct/behaviour <br>   - dress code <br>   - statement of workplace values <br><br> • implied standards such as honesty and respect relative to the organisation culture and generally accepted within the wider community <br><br> • standards expressed in legislation and regulations such as anti-discrimination legislation <br><br> • rewards and recognition for high performing staff |
| ***Employees, colleagues, customers and suppliers*** <br> **may refer to:** | • team members <br> • employees at the same level, supervisors and more senior managers <br> • internal and/or external contacts |

|  |  |
|---|---|
|  | • people from a wide variety of social, cultural and ethnic backgrounds |
| *Networks* **may be:** | • internal and/or external |
|  | • with individuals or groups |
|  | • through established structures or unstructured arrangements |
| *Guidance, counselling and support* **may be:** | • informal support provided by frontline managers including discussion of issues and exploration of mechanisms to resolve problems within organisational guidelines |
|  | • formal and professional support and guidance arranged from alternative internal or external sources within organisational guidelines |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they are able to manage the process of accessing and analysing information to achieve planned outcomes, communicate information and ideas to a range of stakeholders and they must be able to manage a process which facilities the development and maintenance of positive work relationships, they must be able to encourage the development of trust and confidence within the work team and resolve problems and conflicts effectively and efficiently.

## Specific Evidence Requirements

| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
|---|---|
|  | • the principles and techniques involved in the management and organisation of: |
|  |   - the organisation's information |
|  |   - policy development |
|  |   - strategic and operational planning and working strategically |
|  | • effective workplace relationship through: |
|  |   - developing trust and confidence |
|  |   - fostering of consistent behaviour in work relationships |

- identifying the cultural and social environment
- identifying and assessing interpersonal styles
- developing, maintaining and managing networks
- problem identification and resolution
- handling conflict
- consultation and communication techniques
- managing poor work performance
- managing relationships to achieve strategic planning responsibilities
- monitoring, managing and introducing ways to improve work relationships
- contributing to the elimination of discrimination/bias

**Required skills and attributes include:**

- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
- functional literacy skills to access and use workplace information
- research, analysis, interpretation and reporting skills
- a range of communication and other skills that support effective workplace relationships:
  - responding to unexpected demands from a range of people
  - using consultative processes effectively
  - forging effective relationships with internal and/or external people and developing, maintaining and managing these networks
  - gaining the trust and confidence of colleagues
  - dealing with people openly and fairly
  - using coaching and mentoring skills to provide support to colleagues

**Key competencies or generic skills relevant to this unit**

The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:

Level (1) represents the competence to undertake tasks effectively
Level (2) represents the competence to manage tasks
Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

The bulleted points provide examples of how the key competencies can be applied for this unit.

| Communicating ideas and information (3) | • consulting with a variety of stakeholders both within and outside the organisation, including individuals and members of the work team |
| | • providing guidance and counselling support to team members |
| Collecting, analysing and organising information (3) | • establishing processes to facilitate effective workplace relationships and to facilitate the development of networks |
| Planning and organising activities (3) | • building strategic networks to enhance workplace opportunities both within and outside the organisation |
| Working in a team (3) | • managing strategies to facilitate effective workplace relationships |
| Using mathematical ideas and techniques (2) | • using appropriate calculations to assist strategic planning |
| Solving problems (3) | • facilitating effective workplace relationships and communication processes, especially in the area of conflict resolution and as an aid to decision making |
| Using technology (2) | • using technology to assist in the management of information |
| Innovation skills (3) | • developing strategic networks to plan for effective workplace relationships and to achieve effective communication at all levels of the organisation and with external contacts |

**Products that could be used as evidence include:**

- documentation produced in managing effective workplace relationships, such as:
  - contribution to organisational policies and procedures
  - procedures and policies for dealing with diversity, and related codes of conduct
  - actions taken including advice and input into management decisions to address social and ethical standards in the workplace
  - actions taken including advice and input into management decisions to address issues and problems within the work team
  - actions taken to address methods of accessing networks and developing strategic contacts within and outside the organisation
  - learning and development plans for team members
  - materials developed for coaching, mentoring and training

- induction programs developed and/or delivered
- actions taken to address internal and external communication processes
- reviews of people management
- advice and input into management decisions related to the work team
- records of people management lessons learned
- records of OHS consultation

| **Processes that could be used as evidence include:** | • how strategies have been developed to ensure that information was collected and accessed |
|---|---|
| | • how strategic and operational planning was conducted |
| | • how policies were established, and contributions sought and used to develop new ideas and approaches |
| | • how the organisation's social and ethical standards have been used within workplace relationships |
| | • how trust and confidence have been developed and maintained |
| | • how interpersonal styles and methods were adjusted to the organisation's social and cultural environment |
| | • how strategic networks were used to build relationships |
| | • how ongoing planning and implementation has been conducted |
| | • how strategies were developed to ensure that difficulties are addressed and solutions planned |
| | • how colleagues were counselled, guided and supported to resolve work difficulties |
| | • examples of how poor work performance and conflict was managed |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
| | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • that examples of actions taken by the candidate to manage effective workplace relationships are provided |

| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |
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# BSBFLM505B Manage operational plan

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| **Unit Descriptor** | This unit specifies the outcomes required to develop and monitor the implementation of the operational plan to provide efficient and effective workplace practices within the organisation's productivity and profitability plans. Management at a strategic level requires systems and procedures to be developed and implemented to facilitate the organisation's operational plan. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM505A Manage operational plan |
| | Frontline managers have a key role managing individuals within work teams/groups. They play an important part in managing the performance of people who report to them directly. |
| | At this level, work will normally be carried out within complex and diverse methods and procedures which require the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies. |
| | This unit builds on BSBFLM405B Implement operational plan. Consider co-assessment with BSBFLM503B Manage effective workplace relationships, BSBFLM506B Manage workplace information systems, BSBMGT505A Ensure a safe workplace, BSBFLM509B Facilitate continuous improvement and BSBFLM512A Ensure team effectiveness. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Develop operational plan** | 1.1 *Resource requirements* are researched, analysed and documented and an operational plan is *developed and/or implemented* in consultation with *relevant personnel, colleagues and specialist resource managers* |
| | 1.2 *Consultation processes* are developed and/or implemented as an integral part of the operational planning process |
| | 1.3 *Operational plans* are developed to contribute to the achievement of the organisation's performance/business plan |
| | 1.4 Details of the operational plan include the development of *key performance indicators* to measure organisational performance |

|   |   |   |
|---|---|---|
|   | 1.5 | *Contingency plans* are developed and implemented at appropriate stages of operational planning |
|   | 1.6 | The development and presentation of proposals for resource requirements are assisted by a variety of information sources, and specialist advice is sought as required |
| **2. Plan and manage resource acquisition** | 2.1 | Strategies are developed and implemented to ensure that employees are recruited and/or inducted within the organisation's human resource management policies and practices |
|   | 2.2 | Strategies are developed and implemented to ensure that physical resources and services are acquired in accordance with the *organisation's policies, practices and procedures* |
| **3. Monitor and review operational performance** | 3.1 | Performance systems and processes are developed, monitored and reviewed to assess progress in achieving profit and productivity plans and targets |
|   | 3.2 | Budget and actual financial information is analysed and interpreted to monitor and review profit and productivity performance |
|   | 3.3 | Areas of under performance are identified, solutions recommended, and prompt action is taken to rectify the situation |
|   | 3.4 | Systems are planned and implemented to ensure that mentoring and coaching are provided to support individuals and teams to use resources effectively, economically and safely |
|   | 3.5 | Recommendations for variations to operational plans are negotiated and approved by *designated persons/groups* |
|   | 3.6 | Systems are developed and implemented to ensure that procedures and records associated with documenting performance are managed in accordance with the organisation's requirements |

# Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| **OHS considerations may include:** | • knowledge of OHS legislation, principles and practice within the context of the organisation's operations and plans<br>• OHS practice as an ethical standard and legislative requirement<br>• training of all employees in health and safety procedures<br>• update and review of organisation's OHS systems, procedures and records<br>• organisation's procedures for dealing with hazardous events<br>• adjustment of communications and OHS approach to cater for social and cultural diversity and special needs<br>• inclusion of OHS in key performance indicators |
| *Resource requirements* **may include:** | • human, physical and financial resources — both current and projected<br>• stock requirements and requisitions<br>• good and services to be purchased and ordered |
| *Developed and/or implemented in some cases* **may mean that:** | • the operational plan has been developed at a higher or specialist level and that a frontline manager may have little or no input to its development |
| *Relevant personnel, colleagues and specialist resource managers* **may include:** | • managers<br>• supervisors<br>• other employees<br>• OHS committee(s) and other people with specialist responsibilities<br>• union or employee representatives<br>• people at the same level or more senior managers<br>• people from a wide range of social, cultural and ethnic backgrounds |
| *Consultation processes* **may refer to:** | • meetings, interviews, brainstorming sessions, email/intranet communications, newsletters or other processes and devices which ensure that all employees have the opportunity to contribute to team and individual operational plans |

| | |
|---|---|
| ***Operational plans* may include:** | • mechanisms used to provide feedback to the work team in relation to outcomes of consultation<br><br>• tactical plans developed by the department or section to detail product and service performance<br><br>• organisational plans |
| ***Key performance indicators* may refer to:** | • measures for monitoring or evaluating the efficiency or effectiveness of a system which may be used to demonstrate accountability and to identify areas for improvements |
| ***Contingency plans* may include:** | • rental, hire purchase or alternative means of procurement of required materials, equipment and stock<br><br>• contracting out or outsourcing human resource and other functions or tasks<br><br>• restructuring of organisation to reduce labour costs<br><br>• strategies for reducing costs, wastage, stock or consumables<br><br>• diversification of outcomes<br><br>• recycling and re-use<br><br>• finding cheaper or lower quality raw materials and consumables<br><br>• seeking further funding<br><br>• increasing sales or production<br><br>• risk identification, assessment and management processes<br><br>• succession planning |
| ***The organisation's policies, practices and procedures* may include:** | • those organisational guidelines which govern and prescribe operational functions, such as the acquisition and management of human and physical resources<br><br>• Standard Operating Procedures<br><br>• undocumented practices in line with organisational operations<br><br>• organisational culture |
| ***Designated persons/groups* may include:** | • managers or supervisors whose roles and responsibilities include decision making on operations<br><br>• other work groups or teams whose work will be affected by recommendations for variations<br><br>• groups designated in workplace policies and procedures<br><br>• other stakeholders such as Board members |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence of their ability to manage the implementation of the operational plans for department or section. This will include acquisition and use of resources, contingency planning, financial information and budgets, performance reports, and evidence of a system to monitor and adjust operational performance plans as required.

## Specific Evidence Requirements

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|---|---|
| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • the principles and techniques involved in the management and organisation of: |
| |    - planning and managing operations |
| |    - consultation and communication |
| |    - contingency planning |
| |    - resource planning and acquisition |
| |    - resource management systems |
| |    - budgeting and financial analysis and interpretation |
| |    - monitoring and review of performance systems and processes |
| |    - reporting performance |
| |    - problem identification and resolution |
| | • alternative approaches to improving resource usage and eliminating resource inefficiencies and waste |
| | • ways of supporting individuals/teams who have difficulty in performing to the required standard |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| | • functional literacy skills to access and use workplace information |
| | • skills to: |
| |    - monitor and review a safe workplace and environment |

- access and use feedback to improve operational performance
- prepare recommendations to improve operational plans
- access and use established systems and processes
- coaching and mentoring skills to provide support to colleagues

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:<br><br>Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks.<br><br>The bulleted points provide examples of how the key competencies can be applied for this unit. |
|---|---|
| Communicating ideas and information (3) | • sharing information with all stakeholders, including members of work teams to manage the facilitation of the operational plan<br>• negotiating variation to operational plans |
| Collecting, analysing and organising information (3) | • acquiring information for reporting and planning purposes to aid in the development and management of the operational plan |
| Planning and organising activities (3) | • planning resource acquisition and usage including human resources and contingency planning |
| Working in a team (3) | • managing the operation to achieve planning outcomes, especially in regard to team effectiveness |
| Using mathematical ideas and techniques (2) | • developing, analysing and monitoring budget and financial plans |
| Solving problems (3) | • developing and managing risk management and contingency plans and addressing unsatisfactory performance in all areas of the operation |
| Using technology (2) | • using technology to assist the management of information and to aid the planning process |
| Innovation skills (3) | • managing the team's operations by developing innovative operational plans to achieve organisational outcomes |
| **Products that could be used as evidence include:** | • documentation produced while managing the operational plan, such as:<br> - operational plan<br> - rosters and staff allocation<br> - resource planning<br> - actions taken to address resource shortfalls |

- financial plans and budgets
- contingency planning
- risk management plans
- learning and development plans for team members
- materials developed for coaching, mentoring and training
- induction programs developed and/or delivered
- actions taken to address poor, unsafe or excellent performance
- actions taken to address issues and problems within work team
- reviews of people management
- advice and input into management decisions related to the operational plan
- records of people management lessons learned

**Processes that could be used as evidence include:**

- how resource requirements have been researched and analysed, and management procedures addressed

- how work has been allocated within work team, and the rationale for allocation

- how strategies have been developed/implemented to ensure that employees were recruited and resources acquired

- how financial plans and budgets were formulated

- how the operational plan was developed and/or managed

- how key performance indicators were developed and used

- how contingency planning was undertaken

- how team members were guided and supported in performing their role, including induction process for new team members

- how individual learning and development pathways were developed

- how performance management system was implemented within work team and how areas of under performance were identified and addressed

- how problems and issues within the work team were addressed

- how input and advice was provided to management in relation to human resource management of the work team

|  | • how own people management processes were reviewed and evaluated, and improvements identified, reported and acted upon |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
|  | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • that examples of actions taken by the candidate to manage the operational plan are provided |
| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM506B Manage workplace information systems

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|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to manage the identification, acquisition, analysis and use of appropriate information which plays a significant part in the organisation's effectiveness. Particular emphasis is on the development of systems and the analysis of information. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM506A Manage workplace information systems |
| | Frontline managers, in identifying, acquiring, analysing and using appropriate information, play a significant role in contributing to the organisation's effectiveness. |
| | At this level, work will normally be carried out within complex and diverse methods and procedures which require the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies. |
| | This unit builds on BSBFLM406B Implement workplace information system. Consider co-assessment with BSBFLM505B Manage operational plan, BSBFLM507B Manage quality customer service, BSBMGT505A Ensure a safe workplace, BSBFLM509B Facilitate continuous improvement and BSBFLM512A Ensure team effectiveness. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Utilise information systems** | 1.1 Strategies are developed to ensure effective use of organisational information systems, so that *information* required by teams can be determined and found |
| | 1.2 Information held by the organisation is accessed and reviewed to determine suitability, accessibility, currency and reliability |
| | 1.3 *Strategies* are developed to source and obtain information which is not immediately available/accessible |
| **2. Collect, analyse and review information** | 2.1 Systems are developed to ensure that collection of information is timely, adequate, relevant to the needs of teams, and is in a format suitable for analysis, interpretation and dissemination |

| | 2.2 | Information is analysed to identify and report relevant trends and developments to support the strategic planning process |
|---|---|---|
| **3. Manage the information systems** | 3.1 | Strategies are developed to ensure that management information systems are used effectively to store and retrieve data to aid the decision making process |
| | 3.2 | Strategies are developed and implemented to ensure that *technology* available in the work area is used to manage information effectively |
| | 3.3 | Strategies are developed and implemented to improve the information system, and communicated to *designated groups* as required |
| **4. Develop business plan/budgets** | 4.1 | Strategies are developed to maximise team involvement in business plans and/or budget preparation in a way which uses their contribution effectively and contributes to gaining support for the outcomes |
| | 4.2 | *Business plans and/or budgets* are prepared and presented in accordance with the organisation's guidelines and requirements |
| | 4.3 | *Contingency plans* are developed as part of the strategic planning process |
| **5. Manage resource planning** | 5.1 | Resource proposals are developed in consultation with *relevant stakeholders* using all available planning information |
| | 5.2 | Estimates of resource needs and use reflect the organisation's business plans, and customer and supplier requirements |
| | 5.3 | Proposals to secure resources are supported by clearly presented submissions describing realistic options, benefits, costs and outcomes |

# Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations, anti-discrimination and record keeping standards and legislation |
| | • relevant industry codes of practice |
| **OHS considerations may include:** | • knowledge of OHS legislation, principles and practice within the context of the organisation's operations and plans |
| | • health and safety procedures at the workplace relevant to employees, including the use and maintenance of risk control measures |
| | • OHS practice as an ethical standard and legislative requirement |
| | • training of all employees in health and safety procedures, and regular updating of OHS systems |
| | • inclusion of OHS in business plans |
| | • inclusion of OHS in resource proposals |
| | • adjustment of OHS approach to cater for social and cultural diversity and special needs |
| *Information* **may include:** | • data shared and retrieved in various forms such as in writing or verbally, electronically or manually |
| | • policies and procedures |
| | • planning and organisational documents |
| | • organisational performance data |
| | • financial and contractual data |
| | • marketing and customer-related data |
| | • continuous improvement and quality assurance data |
| | • archived, filed and historical background data |
| | • data available internally or externally |
| *Strategies* **may refer to:** | • long-term or short-term plans for obtaining storing and retrieving information |
| | • dialogue with personnel holding information |
| | • training activities |
| | • questionnaires, surveys and interviews |
| *Technology* **may include:** | • computerised systems and software such as databases, project management and word-processing |
| | • telecommunications devices |
| | • any other technology used to carry out work roles and responsibilities |

| | |
|---|---|
| ***Designated groups* may include:** | • managers or supervisors whose roles and responsibilities concern information systems |
| | • other work groups or teams whose work will be affected by the system |
| | • groups designated in workplace policies and procedures |
| | • other stakeholders accessing the information system such as customers and service providers |
| ***Business plans and/or budgets* may refer to:** | • long-term budgets/plans |
| | • short-term budgets/plans |
| | • operational plans |
| | • spreadsheet-based financial projections |
| | • cash flow projections |
| | • targets or key performance indicators (KPIs) for production, productivity, wastage, sales, income and expenditure |
| ***Contingency plans* may include:** | • rental, hire purchase or alternative means of procurement of required materials, equipment and stock |
| | • contracting out or outsourcing human resource and other functions or tasks |
| | • restructuring of organisation to reduce labour costs |
| | • strategies for reducing costs, wastage, stock or consumables |
| | • diversification of outcomes |
| | • recycling and re-use |
| | • finding cheaper or lower quality raw materials and consumables |
| | • seeking further funding |
| | • increasing sales or production |
| | • risk identification, assessment and management processes |
| | • succession planning |
| ***Relevant stakeholders* may include:** | • internal and external contacts |
| | • senior management and Board members |
| | • individuals within the work team |
| | • the organisation's clients and customers |
| | • business or government contacts |
| | • funding bodies |
| | • professional associations |
| | • unions/employee groups |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they are able to access, use and communicate workplace information. They must be able to show evidence of the ability to manage the design of the workplace information system to facilitate the operational plan. They must be able to provide feedback on how to improve the management information system and research and prepare financial and resource plans/proposals.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • the principles and techniques involved in the management and organisation of: |
| |    - strategy development and implementation which facilitates workplace information systems |
| |    - accessing and assessing information |
| |    - contingency planning |
| |    - problem identification and resolution |
| |    - leadership and mentoring techniques |
| |    - information systems |
| |    - development of resource proposals |
| | • consultation and communication techniques |
| | • methods of collecting, analysing, reviewing and reporting information |
| | • financial concepts in business plans and budgets |
| | • methods to gain efficiencies in resource management |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| | • functional literacy skills to access and use workplace information |
| | • communication skills |
| | • research skills including collecting, analysing, interpreting and reporting information |
| | • skills to identify current and future planning for information requirements of the team |

- information management skills

- skills to improve information usage in decision making

- information presentation skills

- coaching and mentoring skills to provide support to colleagues

- technology skills to extract/input/present information

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| | Level (1) represents the competence to undertake tasks effectively Level (2) represents the competence to manage tasks Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (3) | • communicating verbally with stakeholders, especially individuals and members of the work team, to obtain information and feedback and to discuss strategies<br>• communicating in writing, including submissions on proposals to secure resources, business plans, budgets, systems and strategies |
| Collecting, analysing and organising information (3) | • accessing a range of information to assist in the development and/or implementation of the information system<br>• analysing data, information and feedback to identify trends<br>• ensuring the system is appropriate for information storage and retrieval |
| Planning and organising activities (3) | • preparing business plans, budgets and proposals<br>• undertaking risk management and contingency planning |
| Working in a team (3) | • developing and maintaining the information management system in consultation with work team and other stakeholders<br>• maintaining team cohesion and effectiveness |
| Using mathematical ideas and techniques (2) | • making budget calculations to aid financial planning |
| Solving problems (3) | • addressing problems related to the development and implementation of the information system |
| Using technology (2) | • using appropriate technology to assist in the management of information |

| | |
|---|---|
| Innovation skills (3) | • developing an innovative approach to the development of the information system to enhance business operations |
| **Products that could be used as evidence include:** | • documentation produced in managing the workplace information system, such as: |

- contribution to organisational policies and procedures
- procedures and policies for dealing with information management systems, and related codes of conduct
- actions taken to develop an information system and address issues of information collection, retrieval and analysis
- strategies developed to ensure management information system is used effectively
- actions taken to address internal and external information management issues and problems
- advice and input into management decisions related to management information systems
- budgets and business plans developed
- contingency plans developed
- resource proposals
- learning and development plans for team
- materials developed for coaching, mentoring and training
- induction programs developed and/or delivered
- actions taken to address issues and problems
- reviews of people management
- records of people management lessons learned

| | |
|---|---|
| **Processes that could be used as evidence include:** | • how strategies have been developed to ensure the organisational information system is utilised |
| | • how the system has been managed to ensure that information is collected efficiently and effectively |
| | • how strategies ensure information is accessed and reviewed |
| | • how record keeping systems have been managed |
| | • how systems have been designed to store and use data for the decision making process |
| | • how systems have been designed to ensure that technology is used to manage information effectively |
| | • examples of how strategies have been designed and used to improve the information system |

|  | • how strategies were developed to maximise team involvement in budgets and planning |
|---|---|
|  | • how budgets, business and contingency plans were prepared and presented |
|  | • how resource proposals were developed and consulted on |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
|  | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • that examples of actions taken by the candidate to manage workplace information systems are provided |
| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM507B Manage quality customer service

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to develop strategies to manage organisational systems that ensure products and services are delivered and maintained to standards agreed by the organisation and the customer. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM507A Manage quality customer service |

Frontline managers are involved in ensuring that products and services are delivered and maintained to standards agreed by the organisation and the customer. They work within the context of the organisation's policies and practices as well as legislation, conventions and codes of practice.

At this level, work will normally be carried out within complex and diverse methods and procedures which require the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies.

This unit builds on BSBCMN410A Coordinate implementation of customer service strategies. Consider co-assessment with BSBFLM512A Ensure team effectiveness, BSBFLM506B Manage workplace information system, BSBMGT505A Ensure a safe workplace, and BSBFLM509B Facilitate continuous improvement.

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Plan to meet internal and external customer requirements** | 1.1 The needs of *customers* are investigated, understood and assessed, and included in planning processes |
| | 1.2 Plans achieve the *quality*, time and cost specifications agreed with customers |
| **2. Ensure delivery of quality products and/or services** | 2.1 Products and/or services are delivered to customer specifications within the team's business plan |
| | 2.2 Team performance is managed to consistently meet the organisation's quality and delivery standards |
| | 2.3 Leadership, supervision, coaching and mentoring assist colleagues to overcome difficulty in meeting customer service standards |

| 3. **Monitor, adjust and review customer service** | 3.1 | *Strategies* to monitor progress in achieving product and/or service targets and standards are developed and used |
|---|---|---|
| | 3.2 | Strategies to obtain customer feedback are developed and used to improve the provision of products and/or services |
| | 3.3 | *Resources* are developed, procured and used effectively to provide quality products and/or services to customers |
| | 3.4 | Decisions to overcome problems and to adapt customer service and products and/or service delivery are taken in consultation with appropriate individuals and groups |
| | 3.5 | Records, reports and recommendations are managed within the organisation's systems and processes |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments |
|---|---|
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations, anti-discrimination and record keeping standards and legislation |
| | • relevant industry codes of practice |
| **OHS considerations may include:** | • knowledge of OHS legislation, principles and practice within the context of the    rganization's operations and plans |
| | • OHS practice as an ethical standard and legislative requirement |
| | • training of all employees in health and safety procedures |
| | • regular updating and reviewing of the    rganization's OHS systems, procedures and records |
| | •    rganization's responsibilities to customers and suppliers |
| | • adjustment of communications and OHS approach to cater for social and cultural diversity and special needs |
| ***Customers* may be:** | • co-workers, peers and fellow frontline managers |

- supervisors
- Board members
- clients, purchasers of services
- members of the general public who make contact with the    rganization, such as prospective purchasers of services
- suppliers of goods and services and contractors providing goods and services
- potential funding bodies

***Quality*** **may refer to*:***

- the characteristics of a product , system, service or process meets the requirements of customers and interested parties

***Strategies*** **may refer to:**

- policies and procedures
- long-term or short-term plans for monitoring achievement and evaluating effectiveness
- feedback forms and other devices to enable communication from customers
- electronic feedback mechanisms using intranet, internet and email
- training and development activities
- questionnaires, survey and interviews
- databases and other controls to record and compare data over time

***Resources*** **may include:**

- people
- power/energy
- information
- finance
- buildings/facilities
- equipment
- technology
- time

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they are able to develop strategies designed to meet customer needs; provide quality service; review and improve service; develop processes to access and follow-up customer feedback; and manage a system for reporting/recording customer service outcomes.

**Specific Evidence Requirements**

**Required knowledge and understanding include:**

- relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination
- the organisation's policies and procedures for dealing with customers
- the principles and techniques involved in the management and organisation of:
  - customer needs research
  - strategies to obtain customer feedback
  - customer relations
  - customer behaviour
  - problem identification and resolution
  - quality customer service delivery
  - ongoing product and/or service quality
  - record keeping and management methods
  - strategies for monitoring, managing and introducing ways to improve customer service relationships
- consultation and communication techniques
- leadership and mentoring techniques
- management of relationships to achieve strategic planning responsibilities
- strategies for contributing to the elimination of discrimination/bias

**Required skills and attributes include:**

- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
- functional literacy skills to access and use workplace information
- communication skills
- skills to research, analyse and report information
- planning and organising skills
- team work skills
- problem-solving skills to deal with complex and non-routine difficulties
- technology skills at the appropriate level
- coaching and mentoring skills to provide support to colleagues

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
|---|---|
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks.<br>The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (3) | • consulting with others on customer needs and to report on customer service outcomes |
| Collecting, analysing and organising information (3) | • ensuring that appropriate strategies are in place to collect, organise and monitor customer information |
| Planning and organising activities (3) | • planning to meet customer needs and to manage a system for reporting/recording customer service outcomes |
| Working in a team (3) | • using leadership, supervision, coaching and mentoring to manage team performance<br>• consulting with team members on planning, delivery and improvement |
| Using mathematical ideas and techniques (2) | • undertaking calculations associated with customer service |
| Solving problems (3) | • identifying and resolving deficiencies in customer service and developing strategies to improve service |
| Using technology (2) | • using technology to assist the management of customer information |
| Innovation skills (3) | • developing an innovative approach to the development of strategies to improve customer service provision |
| **Products that could be used as evidence include:** | • documentation produced in managing quality customer service, such as:<br>   - contribution to organisational policies and procedures<br>   - procedures and policies for dealing with customer service provision, and related codes of conduct<br>   - actions taken to address customer service information collection and retrieval<br>   - actions taken to address methods of analysing information and developing and/or maintaining a customer service information system<br>   - actions taken to address internal and external customer service issues<br>   - advice and input into management decisions related to customer service |

|  | - learning and development plans for team members |
|--|---|
| | - materials developed for coaching, mentoring and training |
| | - induction programs developed and/or delivered |
| | - actions taken to address issues and problems within work team |
| | - reviews of people management |
| | - records of people management lessons learned |
| **Processes that could be used as evidence include:** | • how customers needs have been addressed |
| | • how planning was conducted and specifications achieved |
| | • how products and/or services have been delivered |
| | • how team performance was managed |
| | • how team members were guided and supported in performing their role |
| | • examples of strategies developed to monitor customer service and to obtain customer feedback |
| | • examples of resources developed to provide for customers needs |
| | • examples of strategies to adapt customer service delivery to overcome problems |
| | • examples of how records and reporting procedures were managed within the organisation's processes |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
| | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • that examples of actions taken by the candidate to promote quality customer service are provided |
| **Integrated competency assessment means:** | • this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM509B Facilitate continuous improvement

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|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to lead and manage continuous improvement systems and processes. Particular emphasis is on the development of systems and the analysis of information to monitor and adjust performance strategies and to manage opportunities for further improvements. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM509A Promote continuous improvement |
| | Frontline managers have an active role in managing the continuous improvement process in achieving the organisation's objectives. Their position, closely associated with the creation and delivery of products and services, means that they play an important part in influencing the ongoing development of the organisation. |
| | At this level, work will normally be carried out within complex and diverse methods and procedures which require the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies. |
| | This unit builds on BSBFLM409B Implement continuous improvement. Consider co-assessment with BSBFLM512A Ensure team effectiveness, BSBFLM505B Manage operational plan, and BSBFLM507B Manage quality customer service, BSBMGT505A Ensure a safe workplace, BSBFLM510B Facilitate and capitalise on change and innovation, and BSBFLM511B Develop a workplace learning environment. |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Lead continuous improvement systems and processes** | 1.1 *Strategies* are developed to ensure that team members are actively encouraged and supported to participate in decision making processes, and to assume responsibility and exercise initiative as appropriate |

|   | 1.2 | *Systems* are established to ensure that the organisation's *continuous improvement processes* are communicated to all *stakeholders* |
|---|---|---|
|   | 1.3 | Effective mentoring and coaching processes are developed to ensure that individuals and teams are able to implement and support the organisation's continuous improvement processes |
| **2. Monitor and adjust performance strategies** | 2.1 | Strategies are developed to ensure that systems and procedures including *technology* are used to monitor *operational progress* and to identify ways in which planning and operations could be improved |
|   | 2.2 | Customer service strategies and processes are improved through continuous improvement techniques and processes |
|   | 2.3 | Strategies are adjusted and communicated to all stakeholders according to organisational procedures |
| **3. Manage opportunities for further improvement** | 3.1 | *Processes* are established to ensure that team members are informed of savings and productivity/ service improvements in achieving the business plan |
|   | 3.2 | Processes include *documentation of work team performance* to aid the identification of further opportunities for improvement |
|   | 3.3 | Areas which have recorded improvement and opportunities for improvement, are taken into account in all aspects of future planning |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations, anti-discrimination and record keeping standards and legislation<br>• relevant industry codes of practice |
|---|---|
| **OHS considerations may include:** | • knowledge of OHS legislation, principles and practice within the context of the organisation's operations and plans |

| | |
|---|---|
| | • OHS practice as an ethical standard and legislative requirement |
| | • training of all employees in health and safety procedures |
| | • establishing and maintaining the continuous improvement processes of any OHS management system |
| | • regularly updating and reviewing the organisation's OHS systems, procedures and records |
| | • organisation's procedures for dealing with hazardous events |
| | • adjustment of communications and OHS approach to cater for social and cultural diversity and special needs |
| *Strategies* **may refer to:** | • long-term or short-term plans factoring in opportunities for team input |
| | • mentoring and 'buddy' systems to support team members in participating in decision making |
| | • clarification of roles and expectations |
| | • training and development activities |
| | • performance plans |
| | • communication devices and processes, such as intranet and email communication systems, to facilitate input into workplace decisions |
| | • reward/recognition programs for high performing staff |
| *Systems* **may refer to:** | • policies and procedures |
| | • web based communication devices |
| | • forums, meetings |
| | • newsletters and reports |
| *Continuous improvement processes* **may include:** | • policies and procedures which allow an organisation to systematically review and improve the quality of its products, services and procedures |
| | • cyclical audits and reviews of workplace, team and individual performance |
| | • seeking and considering feedback from a range of stakeholders |
| | • modifications and improvements to systems, processes, services and products |
| | • evaluations and monitoring of effectiveness |
| *Stakeholders* **may include:** | • internal and external contacts |
| | • senior management and board members |
| | • individuals within the work team |

|  | |
|---|---|
| *Technology* **may include:** | • the organisation's clients and customers |
|  | • business or government contacts |
|  | • funding bodies |
|  | • unions/employee groups |
|  | • professional associations |
|  | • computerised systems and software such as databases, project management and word-processing |
|  | • telecommunications devices |
|  | • any other technology used to carry out work roles and responsibilities |
| *Operational progress* **may refer to:** | • success in meeting agreed goals and performance indicators |
|  | • productivity gains |
|  | • customer service indicators |
|  | • OHS indicators |
| *Processes* **may refer to***:* | • team meetings |
|  | • email/intranet, newsletters or other communication devices |
|  | • newsletters and bulletins |
|  | • staff reward mechanisms |
| *Documentation of work team performance* **may include:** | • records and reports |
|  | • annotated performance plans |
|  | • quantitative data such as production figures |
|  | • recommendations for improvement |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they are able to develop, monitor and adjust plans, processes and procedures to improve performance; they must also be able to support others to implement the continuous improvement system/processes and to be able to identify and manage opportunities for further improvement.

### Specific Evidence Requirements

| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
|---|---|

- the principles and techniques involved in the management and organisation of:
  - continuous improvement systems and processes
  - benchmarking
  - change management
  - problem identification and resolution
  - leadership and mentoring techniques
  - management of ongoing product and service quality
  - consultation and communication techniques
  - best practice
  - strategies to monitor and adjust operational performance
  - recording and reporting methods
- benefits of continuous improvement
- barriers to continuous improvement
- quality approaches which the organisation may implement
- methods that can be used in continuous improvement
- organisation's recording, reporting and recommendation processes to facilitate continuous improvement

**Required skills and attributes include:**

- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities
- functional literacy skills to access and use workplace information
- communication skills to:
  - gain the commitment of individuals/teams to continuous improvement
  - deal with people openly and fairly
  - use consultation skills effectively
- research, analysis and reporting skills
- monitoring and evaluating skills
- skills to consolidate opportunities for improvement
- coaching and mentoring skills to provide support to colleagues

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (3) | • establishing systems to communicate continuous improvement processes to team members and other stakeholders<br>• ensuring processes inform team members of improvements and achievements |
| Collecting, analysing and organising information (3) | • establishing processes to document performance |
| Planning and organising activities (3) | • adjusting plans and strategies as a result of feedback |
| Working in a team (3) | • developing strategies to involve team members in decision making |
| Using mathematical ideas and techniques (1) | • completing calculations associated with work improvement |
| Solving problems (3) | • developing and improving the organisation's continuous improvement processes and investigating problems with introducing improvements |
| Using technology (2) | • using technology to assist the management of information |
| Innovation skills (3) | • developing an innovative approach to the development of the continuous improvement system to enhance business operations |
| **Products that could be used as evidence include:** | • documentation produced in leading the team, such as:<br>  - contribution to organisational policies and procedures<br>  - procedures and policies for dealing with continuous improvement systems, and related codes of conduct<br>  - actions taken to address information collection and retrieval<br>  - actions taken to address methods of analysing information and developing and/or maintaining a continuous improvement system<br>  - actions taken to address internal and external continuous improvement issues |

|  |  |
|---|---|
|  | - actions taken to address issues and problems within the work team and continuous improvement |
|  | - advice and input into management decisions related to the work team and continuous improvement |
|  | - learning and development plans for team members |
|  | - materials developed for coaching, mentoring and training |
|  | - induction programs developed and/or delivered |
|  | - reviews of people management |
|  | - records of people management lessons learned |
| **Processes that could be used as evidence include:** | • how strategies are developed to encourage team members to participate in the decision making process |
|  | • examples of how continuous improvement processes were communicated to all stakeholders |
|  | • examples of how continuous improvement processes were supported |
|  | • how technology was used to monitor operational progress |
|  | • examples of how plans have been adjusted and communicated to all stakeholders |
|  | • how team members were informed of improvements/innovations |
|  | • how work performance was documented to aid identification of further opportunities for improvement |
|  | • how future planning has included areas which have recorded improvements |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
|  | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • that examples of actions taken by the candidate to facilitate continuous improvement are provided |

| | |
|---|---|
| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM510B Facilitate and capitalise on change and innovation

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to plan and manage the introduction and facilitation of change. Particular emphasis is on the development of creative and flexible approaches, and on managing emerging opportunities and challenges. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM510A Facilitate and capitalise on change and innovation |
| | Frontline managers have an active role in fostering change and acting as a catalyst in the implementation of change and innovation. They have a creative role in ensuring that individuals, the team and the organisation gain from change; and that the customer benefits through improved products and services. |
| | At this level, work will normally be carried out within complex and diverse methods and procedures which require the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies. |
| | This unit builds on BSBCMN412A Promote innovation and change. Consider co-assessment with BSBFLM512A Ensure team effectiveness, BSBFLM505B Manage operational plan, and BSBFLM509B Facilitate continuous improvement |

## Element

Elements define the critical outcomes of a unit of competency.

## Performance Criteria

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement.

| Element | Performance Criteria |
|---|---|
| **1. Participate in planning the introduction and facilitation of change** | 1.1 The *manager* contributes effectively to the organisation's planning processes to introduce and facilitate change |
| | 1.2 Plans to introduce change are made in consultation with *appropriate stakeholders* |
| | 1.3 The organisation's objectives and plans to introduce change are communicated effectively to individuals and teams |
| **2. Develop creative and flexible approaches and** | 2.1 A variety of approaches to managing workplace issues and problems are identified and analysed |

|  |  |  |
|---|---|---|
|  | 2.2 | *Risks* are identified and assessed, and action initiated to manage these to achieve a recognised benefit or advantage to the organisation |
|  | 2.3 | The workplace is managed in a way which promotes the development of innovative approaches and outcomes |
|  | 2.4 | Creative and responsive approaches to resource management improve productivity and services, and/or reduce costs |
| **3. Manage emerging challenges and opportunities** | 3.1 | Individuals and teams are supported to respond effectively and efficiently to changes in the organisation's goals, plans and priorities |
|  | 3.2 | Coaching and mentoring assist individuals and teams to develop competencies to handle change efficiently and effectively |
|  | 3.3 | Opportunities are identified and taken as appropriate, to make adjustments and to respond to the changing needs of customers and the organisation |
|  | 3.4 | *Information needs* of individuals and teams are anticipated and facilitated as part of change implementation and management |
|  | 3.5 | Recommendations for improving the methods and techniques to manage change are identified, evaluated and negotiated with appropriate individuals and groups |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| **OHS considerations may include:** | • knowledge of OHS legislation, principles and practice within the context of the organisation's operations and plans |
| | • OHS practice as an ethical standard and legislative requirement |

|  |  |
|---|---|
|  | • training of all employees in health and safety procedures, and regular updating of records |
|  | • OHS hazard identification, risk assessment and control |
|  | • implementation of procedures for dealing with hazardous events |
|  | • adjustment of communications and OHS approach to cater for social and cultural diversity and special needs |
| *Manager* refers to: | • a person with frontline management roles and responsibilities, regardless of the title of their position |
| *Appropriate stakeholders* may refer to: | • those individuals and organisations who have a stake in the change and innovation being planned, including:<br>  - organisation directors and other relevant managers<br>  - teams and individual employees who are both directly and indirectly involved in the proposed change<br>  - union/employee representatives or groups<br>  - OHS committees<br>  - other people with specialist responsibilities<br>  - external stakeholders where appropriate — such as clients, suppliers, industry associations, regulatory and licensing agencies |
| *Risks* may refer to: | • any event, process or action that may result in goals and objectives of the organisation not being met |
|  | • any adverse impact on individuals or the organisation |
|  | • various risks identified in a risk management process |
| *Information needs* may include: | • new and emerging workplace issues |
|  | • implications for current work roles and practices including training and development |
|  | • changes relative to workplace legislation, such as OHS |
|  | • workplace data such as productivity, inputs/outputs and future projections |
|  | • planning documents |
|  | • reports |
|  | • market trend data |
|  | • scenario plans |
|  | • customer/competitor data |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they are able to identify opportunities to improve performance in consultation with appropriate individuals and groups. They must be able to show evidence of the ability to develop flexible and creative approaches and strategies to introduce and manage change and innovation and to provide coaching and mentoring support to facilitate change. They must be able to assess risks associated with the introduction of change and manage emerging challenges and opportunities.

## Specific Evidence Requirements

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|---|---|
| **Required knowledge and understanding includes:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• the principles and techniques involved in:<br>  - change and innovation management<br>  - development of strategies and procedures to implement and facilitate change and innovation<br>  - use of risk management strategies: identifying hazards, assessing risks and implementing risk control measures<br>  - problem identification and resolution<br>  - leadership and mentoring techniques<br>  - management of quality customer service delivery<br>  - consultation and communication techniques<br>  - record keeping and management methods<br>• the sources of change and how they impact<br>• the factors which lead/cause resistance to change |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities<br>• functional literacy skills to access and use workplace information<br>• communication skills to:<br>  - gain the trust and confidence of colleagues<br>  - deal with people openly and fairly<br>  - use consultation skills effectively<br>• research, analysis and reporting skills |

- skills to:
    - influence the organisation's culture so that it is receptive to change and innovation
    - monitor trends in the internal and/or external environment
    - respond positively to new situations/challenges
    - evaluate alternative proposals for change
    - manage resistance to change
    - draw on the diversity of the workplace to assist the organisation benefit from change
- coaching and mentoring skills to provide support to colleagues

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:<br><br>Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks.<br>The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (3) | • consulting with team and stakeholders on plans to introduce change<br>• communicating changes to team and individuals<br>• providing recommendations to management |
| Collecting, analysing and organising information (3) | • obtaining information about the change process and identifying opportunities and risks |
| Planning and organising activities (3) | • organising occasions to discuss change with the team and stakeholders |
| Working in a team (3) | • supporting the team to respond positively to change<br>• encouraging creative responses from team members |
| Using mathematical ideas and techniques (2) | • making calculations associated with implementing change |
| Solving problems (3) | • addressing difficulties arising from the changes |
| Using technology (2) | • using technology to assist in the management of information to facilitate change |
| Innovation skills (3) | • taking an innovative approach to the development of the change process to enhance business operations |
| **Products that could be used as evidence include:** | • documentation produced in leading change and innovation, such as: |

|  | - contribution to organisational policies and procedures |
|---|---|
|  | - procedures and policies for dealing with change and innovation, and related codes of conduct |
|  | - evidence of actions taken to address information collection and retrieval |
|  | - evidence of actions taken to address methods of analysing information and developing change and innovation processes |
|  | - evidence of actions taken to address internal and external change and innovation management issues |
|  | - evidence of actions taken to address issues and problems within work team and change process |
|  | - evidence of advice and input into management decisions related to the work team and change process |
|  | - learning and development plans for team members |
|  | - materials developed for coaching, mentoring and training |
|  | - induction programs developed and/or delivered |
|  | - records of OHS consultation |
|  | - risk assessment records |
|  | - reviews of people management |
|  | - records of people management lessons learned |
| **Processes that could be used as evidence include:** | • how planning processes have introduced and facilitated change |
|  | • how plans for change were introduced and consulted on |
|  | • how communication processes were conducted |
|  | • how the operational plan was managed |
|  | • examples of approaches to managing workplace issues |
|  | • examples of risk assessments and measures to minimise risk |
|  | • how performance management system was implemented within work team |
|  | • how problems and issues within the work team were addressed |
|  | • how creative and innovative responses/approaches have affected productivity |
|  | • examples of team members responses to change and how coaching and mentoring was of assistance |

|  | • examples of adjustments to respond to changing needs of customers and/or the organisation |
|  | • examples of response to information needs |
|  | • examples of recommendations for improving methods for managing change |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
|  | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • that examples of actions taken by the candidate to facilitate and capitalise on change and innovation are provided |
| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM511B Develop a workplace learning environment

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to encourage and support the development of a learning environment in which work and learning come together. Particular emphasis is on the development of strategies to facilitate and promote learning and to monitor and improve learning performance. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces the unit BSBFLM511A Develop a workplace learning environment |
| | Frontline managers have a prominent role in encouraging, supporting and facilitating the development of a learning environment in which work and learning come together. |
| | At this level, work will normally be carried out within complex and diverse methods and procedures which require the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies. |
| | This unit builds on BSBCMN404A Develop teams and individuals. Consider co-assessment with BSBFLM501B Manage personal work priorities and professional development, BSBFLM512A Ensure team effectiveness, BSBFLM505B Manage operational plan, BSBFLM507B Manage quality customer service, and BSBMGT505A Ensure a safe workplace. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Create learning opportunities** | 1.1 Potential formal and informal *learning opportunities* are identified |
| | 1.2 *Learning needs* of individuals are identified in relation to the needs of the team and/or enterprise and available learning opportunities |
| | 1.3 *Learning plans* are developed and implemented as an integral part of individual and team performance plans |
| | 1.4 Strategies are developed to ensure that learning plans reflect the *diversity of needs* |
| | 1.5 Organisational procedures maximise individual and team access to, and participation in, learning opportunities |

|   | 1.6 | Effective liaison occurs with *training and development specialists* and contributes to learning opportunities which enhance individual, team and organisational performance |
|---|---|---|
| **2. Facilitate and promote learning** | 2.1 | Strategies are developed to ensure that workplace learning opportunities are used and team members are encouraged to share their skills and knowledge to *encourage a learning culture* within the team |
|   | 2.2 | Organisational procedures are implemented to ensure workplace learning opportunities contribute to the development of appropriate workplace knowledge, skills and attitudes |
|   | 2.3 | Policies and procedures are implemented to encourage team members to assess their own competencies, and to identify own learning and development needs |
|   | 2.4 | The benefits of learning are shared with others in the team and organisation |
|   | 2.5 | Workplace achievement is recognised by timely and appropriate recognition, feedback and rewards |
| **3. Monitor and improve learning effectiveness** | 3.1 | Strategies are used to ensure that team and individual learning performance is monitored to determine the type and extent of any additional work-based support required, and any OHS issues |
|   | 3.2 | Feedback from individuals and teams is used to identify and introduce improvements in future learning arrangements |
|   | 3.3 | Adjustments negotiated with training and development specialists result in improvements to the efficiency and effectiveness of learning |
|   | 3.4 | Processes are used to ensure that records and reports of competency are documented and maintained within the organisation's systems and procedures to inform future planning |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| **OHS considerations may include:** | • knowledge of OHS legislation, principles and practice within the context of the organisation's operations and plans<br>• OHS practice as an ethical standard and legislative requirement<br>• training of all employees in health and safety procedures<br>• regular updating and reviewing of procedures, records and systems<br>• inclusion of OHS requirements in the planning process<br>• inclusion of OHS in learning plans<br>• adjustment of communications and OHS approach to cater for social and cultural diversity and special needs |
| *Learning opportunities* **may include:** | • structured learning activities conducted outside and within the workplace such as:<br>  - training through an RTO leading to a nationally recognised Australian Qualifications Framework (AQF) qualification or Statement of Attainment, for example through a traineeship or New Apprenticeship<br>  - accredited training through an independent organisation such as a State OHS authority<br>  - workshops<br>  - short courses<br>  - action learning<br>• workplace learning activities, that may also contribute to a recognised credential, such as:<br>  - induction<br>  - mentoring<br>  - coaching<br>  - shadowing<br>  - exchange/rotation |
| *Learning needs* **may include:** | • gaps between the competencies held by the employee and the skills and knowledge required to effectively undertake workplace tasks |

| | |
|---|---|
| | • developmental learning, for example the learning required to progress through an organisation and take on new tasks and roles |
| *Learning plans* **may include:** | • team competencies |
| | • team roles and responsibilities |
| | • performance standards |
| | • work outputs and processes |
| | • Key Performance Indicators (KPI) |
| | • codes of conduct |
| | • OHS requirements |
| | • negotiated agreement with individual |
| *Diversity of needs* **may include:** | • learning needs that relate to social, cultural and other types of workplace diversity, such as the need for varied communication styles and approaches |
| *Training and development specialists* **may be:** | • internal or external |
| *Encourage a learning culture* **may refer to:** | • encouraging learning and sharing of skills and knowledge across the work team and the wider organisation to develop competencies of individual team members and the team as a whole |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence that they are able to facilitate the development of a learning environment. They must be able to show evidence of the ability to identify workplace activities which facilitate learning, and negotiate learning arrangements with training and development specialists. They also must be able to develop strategies to monitor performance of individuals and the team and use this to improve learning effectiveness and future learning arrangements.

### Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • the principles and techniques involved in the management and organisation of: |
| |    - adult learning |
| |    - a learning environment and learning culture |
| |    - work based learning |

- structured learning

- problem identification and resolution

- leadership

- coaching and mentoring

- consultation and communication

- record keeping and management methods

- monitoring and reviewing workplace learning

- improvement strategies

- management of relationships to achieve a learning environment

- strategies that contribute to the elimination of discrimination/bias

**Required skills and attributes include:**

- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

- functional literacy skills to access and use workplace information

- communication skills to:

  - encourage colleagues to share their knowledge and skills

  - gain the trust and confidence of colleagues

  - deal with people openly and fairly

  - use consultation skills effectively

- skills to facilitate, promote and monitor learning:

  - identifying learning needs

  - developing learning plans

  - selecting and using work activities to create learning opportunities

  - establishing a workplace which is conducive to learning

  - negotiating learning arrangements with training and development specialists

  - using coaching and mentoring to support learning

  - evaluating the effectiveness of learning

**Key competencies or generic skills relevant to this unit**

The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:

Level (1) represents the competence to undertake tasks effectively
Level (2) represents the competence to manage tasks
Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

The bulleted points provide examples of how the key competencies can be applied for this unit.

| | |
|---|---|
| Communicating ideas and information (3) | • discussing strategies to facilitate and improve workplace learning<br>• sharing with others the benefits of learning<br>• providing feedback, recognition and rewards to team and individuals |
| Collecting, analysing and organising information (3) | • assembling information about learning options |
| Planning and organising activities (3) | • developing and implementing strategies to facilitate and promote learning |
| Working in a team (3) | • gaining feedback from individuals and team members on learning needs and opportunities |
| Using mathematical ideas and techniques (2) | • compiling data about learning arrangement |
| Solving problems (3) | • resolving difficulties with competency development |
| Using technology (2) | • using technology to assist in the management of information and to promote learning |
| Innovation skills (3) | • developing an innovative approach to the development of a learning culture to enhance business operations |
| **Products that could be used as evidence include:** | • documentation produced in developing a workplace learning environment, such as:<br>  - contribution to organisational policies and procedures<br>  - procedures and policies for dealing with learning systems, and related codes of conduct<br>  - evidence of actions taken to address information collection and retrieval<br>  - evidence of actions taken to address methods of analysing information<br>  - evidence of actions taken to develop and/or maintain a learning culture<br>  - evidence of actions taken to address internal and external learning issues<br>  - evidence of actions taken to address issues and problems within the work team<br>  - evidence of advice and input into management decisions related to the work team and workplace learning<br>  - learning and development plans for team members |

- materials developed for coaching, mentoring and training
- induction programs developed and/or delivered
- reviews of people management
- records of people management lessons learned

| | |
|---|---|
| **Processes that could be used as evidence include:** | • how workplace learning activities were developed and managed |
| | • how work was allocated within work team, and rationale for allocations |
| | • how learning plans were developed |
| | • how team members have been encouraged to participate in learning opportunities |
| | • how procedures have been designed to ensure that individual learning and development pathways were developed and implemented |
| | • how liaison with training and development specialists has occurred, especially in regard to ongoing improvement |
| | • how team members were encouraged to assess their own competencies and to identify own learning and development needs |
| | • how workplace achievement has been recognised |
| | • how input and advice was provided to management and stakeholders in relation to the benefits of learning and development |
| | • how learning and development records have been documented and stored |
| | • how performance management processes were reviewed and evaluated, and improvements identified, reported and acted upon |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
| | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • that examples of actions taken by the candidate to develop a workplace learning environment are provided |

**Integrated competency assessment means:**

- that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity

# BSBFLM512A Ensure team effectiveness

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|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required by frontline managers to facilitate all aspects of team work within the organisation. It involves taking a leadership role in the development of team plans, leading and facilitating team work and actively engaging with the management of the organisation. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | This unit replaces BSBFLM502A Provide leadership in the workplace and BSBFLM504A Facilitate work teams, which have been combined to create this unit. |
| | Frontline managers have an important facilitative role in the development and empowerment of work teams. This will be evident in the way frontline managers work with teams and individuals, work across teams, and the initiative they take in strengthening the links between teams and the organisation's management. |
| | At this level, work will normally be carried out within complex and diverse methods and procedures which require the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies. |
| | This unit builds on BSBFLM412A Promote team effectiveness. |

## Element

Elements define the critical outcomes of a unit of competency.

## Performance Criteria

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement.

**1. Establish team performance plan**

1.1 Team members are *consulted* to establish team purpose, roles, responsibilities and *accountabilities* in accordance with organisational goals, plans and objectives

1.2 *Performance plans* are developed in consultation with team members, to establish expected *outcomes, outputs, key performance indicators* and goals for work team

1.3 Team members are supported in meeting expected performance outcomes

**2. Develop and facilitate team cohesion**

2.1 *Strategies* are developed to ensure team members have input into planning, decision making and operational aspects of work team

2.2 *Policies and procedures* are developed to ensure team members take responsibility for own work and assist others to undertake required roles and responsibilities

2.3 Feedback is provided to team members to encourage, value and reward individual and team efforts and contributions

2.4 *Processes* are developed to ensure that issues, concerns and problems identified by team members are recognised and addressed

**3. Facilitate team work**

3.1 Team members and individuals are encouraged to participate in and take responsibility for team activities, including communication processes

3.2 The team is supported in identifying and resolving work performance problems

3.3 Own contribution to work team serves as a role model for others and enhances the organisation's image to all *stakeholders*

**4. Liaise with stakeholders**

4.1 Open communication processes with all stakeholders are established and maintained

4.2 Information from *line manager/management* is communicated to the team

4.3 Unresolved issues, concerns and problems raised by team members are communicated to, and followed up with, line manager/management and other relevant stakeholders

4.4 Unresolved issues, concerns and problems raised by internal or external stakeholders are evaluated, and necessary corrective action taken

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

**Legislation, codes and national standards relevant to the workplace may include:**

- award and enterprise agreements and relevant industrial instruments
- relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations, anti-discrimination and record keeping standards and legislation
- relevant industry codes of practice

| **OHS considerations may include:** | • knowledge of OHS legislation, principles and practice within the context of the organisation's operations and plans |
| | • OHS practice as an ethical standard and legislative requirement |
| | • training of all employees in health and safety procedures |
| | • regular updating and reviewing of the organisation's OHS systems, procedures and records |
| | • key performance indicators include relevant OHS procedures |
| | • adjustment of communications and OHS approach to cater for social and cultural diversity and special needs |
| ***Consulted* may refer to:** | • conducting meetings, interviews, brainstorming sessions, email/intranet communications, newsletters or other processes and devices which ensure that all employees have the opportunity to contribute to team and individual performance plans |
| | • mechanisms used to provide feedback to the work team in relation to outcomes of consultation |
| ***Accountabilities* may refer to:** | • a statement of conduct outlining responsibilities/actions/performance |
| | • responsibilities as defined in position descriptions, codes of conduct/behaviour, duty statements or similar |
| ***Performance plans* may refer to:** | • team plans based on work assignments and responsibilities |
| | • individual performance plans linked to team goals |
| ***Outcomes, outputs, key performance indicators* may refer to agreed:** | • measures for monitoring and evaluating the efficiency or effectiveness of systems or services |
| | • targets for productivity improvements such as reduced downtime, higher production levels, decreases in absenteeism |
| | • improved individual and team performance and participation |
| | • improvements to systems, operations |
| | • changes in work roles and responsibilities |
| | • quality standards and expectations |
| | • targets for training and development |
| ***Strategies* may refer to:** | • long-term or short-term plans factoring in opportunities for team input |
| | • mentoring and 'buddy' systems to support team members in providing input |

|  |  |
|---|---|
|  | • clarification of roles and expectations |
|  | • training and development activities |
|  | • electronic communication devices and processes, such as intranet and email communication systems, to facilitate input |
|  | • newsletters and briefings |
| **Policies and procedures may refer to:** | • organisational guidelines and systems that govern operational functions |
|  | • procedures that detail the activities that must be carried out for the completion of actions and tasks |
|  | • Standard Operating Procedures |
| **Processes may refer to:** | • discussions with individuals regarding their concerns |
|  | • brainstorming options with the team for addressing concerns |
|  | • creating a matrix of issues and concerns and distributing it for comment |
|  | • distributing drafts for comment with a range of options for resolution of concerns |
|  | • training and development sessions |
| **Stakeholders may include:** | • the work team |
|  | • Board members |
|  | • union/employee groups and representatives |
|  | • business or government contacts |
|  | • funding bodies |
| **Line manager/management may refer to:** | • frontline manager's direct superior |
|  | • other management representatives |
|  | • the Chief Executive Officer |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they are able to demonstrate leadership in developing plans, in leading and facilitating team work and in actively engaging with stakeholders. They must also provide evidence that team work is actively promoted, supported and encouraged within the work team; and their own performance serves as a role model for others and enhances the organisation's image.

**Specific Evidence Requirements**

| | |
|---|---|
| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br><br>• organisational policies and procedures<br><br>• organisational goals, objectives and plans<br><br>• organisational structure and organisational chart<br><br>• the principles and techniques involved in:<br>  - contingency planning<br>  - performance planning<br>  - problem identification and resolution<br>  - consultation and communication<br>  - record keeping and management<br>  - relationship management including motivation and negotiation<br>  - group dynamics, processes and politics<br><br>• methods for collecting and utilising feedback<br><br>• development of strategies, processes and procedures to facilitate and monitor team effectiveness<br><br>• learning and development options available within and through organisation<br><br>• strategies that contribute to the elimination of discrimination/bias |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities<br><br>• communication skills<br><br>• basic training skills, including mentoring and coaching<br><br>• planning and organising skills<br><br>• problem solving skills<br><br>• leadership skills<br><br>• skills to identify needs, goals and aspirations of others<br><br>• group facilitation skills<br><br>• attributes:<br>  - assertive<br>  - persuasive |

- empathic
- communicative
- showing positive leadership
- self-aware
- supportive
- trusting
- open
- flexible
- accommodating
- initiating
- loyal
- recognising achievement
- fair
- adaptable

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (3) | • communicating verbally to lead a team including negotiating, basic training, participating in meetings<br>• communicating in writing including report writing, communicating with management, identifying issues and concerns in writing |
| Collecting, analysing and organising information (3) | • developing systems to maintaining records of own knowledge and skills and that of team members relevant to organisation planning<br>• undertaking analysis following planning activities<br>• developing systems and processes for monitoring and review |
| Planning and organising activities (3) | • planning for own work and the work of team members across a range of teams<br>• contributing to the effectiveness of other teams and the organisation as a whole |
| Working in a team (3) | • leading and representing the team<br>• consulting team members for their input on team effectiveness strategies and feedback<br>• working with others including external parties and team members |

| | |
|---|---|
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation relevant to work of team, including financial data |
| Solving problems (3) | • applying problem solving skills as required to address issues and conflicting requirements arising from inter and intro team activities<br><br>• assisting others to solve problems arising within and between teams |
| Using technology (2) | • using word processing packages, spreadsheets, databases, and other packages to produce written correspondence and reports of activities, financial reporting and data collation.<br><br>• understanding assistive technologies, as necessary |
| Innovation skills (3) | • developing an innovative approach to the development of strategies to improve team effectiveness |
| **Products that could be used as evidence include:** | • documentation produced in ensuring team effectiveness, such as:<br><br>  - reports<br>  - minutes or records of meetings<br>  - work journals or diaries<br>  - learning and development plans developed with team members<br>  - records of actions taken to address issues raised by team members |
| **Processes that could be used as evidence include:** | • how communication process was managed and implemented to ensure that consultation takes place<br><br>• how team members were supported and encouraged to meet expected outcomes<br><br>• strategies to develop and facilitate team cohesion<br><br>• how performance plans were developed<br><br>• how team members were guided and supported in performing their role, including induction process for new team members<br><br>• how performance management system was implemented within work team<br><br>• how problems and issues within the work team have been addressed<br><br>• how input and advice was provided to management in relation to human resource management of the work team<br><br>• how own people management processes were reviewed and evaluated, and improvements identified, reported and acted upon |

| | |
|---|---|
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace<br>• access to team members' input in relation to leadership of frontline manager |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment<br>• that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment<br>• that examples of actions taken by the candidate to ensure team effectiveness are provided |
| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's leadership role in a work team and as part of an integrated assessment activity |

# BSBFLM513A Manage budgets and financial plans within the work team

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required for financial management within a work team in an organisation. This includes planning and implementing financial management approaches, supporting team members whose role involves aspects of financial operations, monitoring and controlling finances, and reviewing and evaluating effectiveness of financial management processes in line with the financial objectives of the work team and the organisation. |
| **Competency Field** | Business management services |
| **Domain** | Frontline management |
| **Application of the Competency** | Frontline managers have a key role in implementing financial processes within the work team in organisations. They play a prominent part in ensuring that costs are controlled, expenditure is within established budgets and legislative and financial compliance requirements are met. |
| | At this level, work will normally be carried out within complex and diverse methods and procedures which require the exercise of considerable discretion and judgement, using a range of problem solving and decision making strategies. |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Plan financial management approaches** | 1.1 *Budget/financial plans* for the work team are accessed |
| | 1.2 Budget/financial plans are clarified with *relevant personnel* within the organisation to ensure that documented outcomes are achievable, accurate and comprehensible |
| | 1.3 Any changes required to be made to budget/financial plans are negotiated with relevant personnel within the organisation |
| | 1.4 *Contingency plans* are prepared in the event that initial plans need to be varied |
| **2. Implement financial management approaches** | 2.1 Relevant details of the agreed budget/financial plans are disseminated to team members |
| | 2.2 *Support* is provided to ensure that team members can competently perform *required roles* associated with management of finances |

|  | 2.3 | *Resources and systems* to manage financial management processes within the work team are determined and accessed |
|---|---|---|
| **3. Monitor and control finances** | 3.1 | *Processes for reporting* of expenditure, income, assets, stock, consumables, equipment and wastage are implemented across the work team to monitor actual expenditure and to control costs |
|  | 3.2 | Expenditure and costs are monitored on an agreed cyclical basis to identify cost variations and expenditure overruns |
|  | 3.3 | Contingency plans are implemented, monitored and modified as required to maintain financial objectives |
| **4. Review and evaluate financial management processes** | 4.1 | *Data and information on the effectiveness of financial management processes* within the work team are collected and collated for analysis |
|  | 4.2 | Data and information on the effectiveness of financial management processes within the work team are analysed and any improvements to existing processes identified, documented and recommended |
|  | 4.3 | Agreed improvements are implemented and monitored in line with financial objectives of the work team and the organisation |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations, anti-discrimination and record keeping legislation<br>• relevant industry codes of practice |
|---|---|
| **OHS considerations may include:** | • knowledge of OHS legislation, principles and practice within the context of the organisation's operations and plans<br>• OHS practice as an ethical standard and legislative requirement<br>• training of all employees in health and safety procedures, and regular updating of OHS systems |

|  |  |
|---|---|
|  | • adjustment of communications and OHS approach to cater for social/cultural diversity and special needs |
| *Budget/financial plans* **may include:** | • long-term budgets/plans |
|  | • short-term budgets/plans |
|  | • operational plans |
|  | • spreadsheet-based financial projections |
|  | • cash flow projections |
|  | • targets or key performance indicators (KPIs) for production, productivity, wastage, sales, income and expenditure |
| *Relevant personnel* **may include:** | • supervisors, fellow frontline managers |
|  | • financial managers, accountants or financial controllers |
| *Contingency plans* **may include:** | • rental, hire purchase or alternative means of procurement of required materials, equipment and stock |
|  | • contracting out or outsourcing human resource and other functions or tasks |
|  | • restructuring of organisation to reduce labour costs |
|  | • strategies for reducing costs, wastage, stock or consumables |
|  | • diversification of outcomes |
|  | • recycling and re-use |
|  | • finding cheaper or lower quality raw materials and consumables |
|  | • seeking further funding |
|  | • increasing sales or production |
|  | • risk identification, assessment and management processes |
|  | • succession planning |
| *Support may include:* | • documentation of procedures |
|  | • intranet-based information |
|  | • training including, mentoring, coaching and shadowing |
|  | • help desk or identified experts within the organisation |
|  | • information briefings or sessions |
|  | • access to specialist advice |
| *Required roles* **may include:** | • maintaining petty cash system |
|  | • purchasing and procurement |
|  | • invoicing clients, customers and consumers |

|  |  |
|---|---|
|  | • debt collection |
|  | • wages and salaries payments and record keeping |
|  | • banking |
|  | • maintaining journals, ledgers and other record keeping systems |
|  | • arranging for use of corporate credit cards |
|  | • ensuring security, accuracy and currency of financial operations |
| **Resources and systems may include:** | • hardware and software |
|  | • human, physical or financial resources |
|  | • specialist advice or support |
|  | • record keeping systems (electronic and paper-based) |
| **Processes for reporting may include:** | • petty cash records |
|  | • logs |
|  | • ledgers and journals |
|  | • spreadsheet-based records |
|  | • invoices and receipts |
|  | • bank statements |
|  | • credit card statements |
|  | • financial reports |
| **Data and information on the effectiveness of financial management processes may include records (paper-based and electronic) related to:** | • income and expenditure |
|  | • cash flow data |
|  | • quotations |
|  | • files of paid purchase and service invoices |
|  | • job costings |
|  | • employee timesheets |
|  | • credit card receipts |
|  | • petty cash receipts |
|  | • wages/salaries books |
|  | • invoices |
|  | • bank account records |
|  | • insurance reports |
|  | • taxation records |
|  | • contracts |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they are able to manage finances for the work team effectively and efficiently and within    rganizational and legislative requirements. This may include evidence of managing the work of others whose roles are associated with financial management and record keeping.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | •   rganizational requirements related to financial management |
| | •   rganization roles in respect to financial delegations, accountabilities and responsibilities |
| | • requirements for   rganizational record keeping and audit requirements |
| | •   rganizational objectives and plans |
| | • financial management requirements and performance measurement |
| | • basic accounting principles |
| | • consultative methods and processes |
| | • the principles and techniques involved in: |
| |    - budgeting |
| |    - cash flows |
| |    - ledgers and financial statements |
| |    - accrual accounting concepts |
| |    - advanced numerical calculations |
| |    - electronic spreadsheets |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| | • communication and training skills |
| | • financial planning and management skills, including budgeting |
| | • contingency management skills |
| | • problem solving skills |

- leadership and personnel management
- monitoring and review skills
- skills in the use of specialist software for financial record keeping and management (if and as relevant)
- attributes:
  - ethical
  - communicative
  - showing positive leadership

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (3) | • communicating verbally to lead a team including negotiating, training, participating in meetings, questioning and discussing<br>• using written communication skills, including those involved in reporting, review and evaluation |
| Collecting, analysing and organising information (3) | • tracking, monitoring and controlling financial data<br>• reviewing and evaluating financial management |
| Planning and organising activities (3) | • planning for delegation of tasks associated with financial management while managing own work |
| Working in a team (3) | • working with team members and providing leadership to team<br>• working with others involved in financial management from outside the team |
| Using mathematical ideas and techniques (3) | • using calculation skills associated with data manipulation involved in financial data |
| Solving problems (3) | • applying problem solving skills as required to address problems arising in managing finances |
| Using technology (2) | • using word processing packages, spreadsheets, databases, and other packages to produce written correspondence and reports related to finances and data collation |
| Innovation skills (3) | • using review process to improve financial management |

| **Products that could be used as evidence include:** | • documentation produced in managing finances within the work team, such as: |
| |    - revised budgets |
| |    - cost estimates |
| |    - cost management plans and strategies |
| |    - cost breakdown structures |
| |    - expenditure forecasts |
| |    - records of cost management lessons learned and recommendations for improvements |
| **Processes that could be used as evidence include:** | • how any required changes to budgets/financial plans were negotiated |
| | • how cost management plans and contingency plans were developed |
| | • how budgets/financial plans were communicated to team members |
| | • how team members were supported in undertaking roles associated with financial management |
| | • how problems and issues with respect to finances were identified and addressed |
| | • how financial management was reviewed and improvements acted upon |
| **Resource implications for assessment include:** | • access by the learner and trainer to appropriate documentation and resources normally used in the workplace |
| **Validity and sufficiency of evidence requires:** | • that this unit can be assessed in the workplace or in a closely simulated work environment |
| | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • that examples of actions taken by the candidate to manage finances across the work team are provided |
| **Integrated competency assessment means:** | • that this unit should be assessed with other frontline management units taken as part of this qualification, as applicable to the candidate's management role in work team and as part of an integrated assessment activity |

# BSBHR504A Manage industrial relations policies and processes

**Unit Descriptor**     This unit covers the range of competencies required of a manager who has day-to-day involvement in, and management of, industrial relations matters within the organisation. It includes negotiations, conflict management and dispute resolution.

This unit is related to BSBHR604A Manage employee relations, which is a broader and more strategic approach to workplace performance.

**Competency Field**     Human Resource Management

| Element | Performance Criteria |
|---|---|
| 1. Develop industrial relations (IR) strategies/policies | 1.1 Strategic plans and operational plans are analysed to determine *long term industrial relations objectives* |
| | 1.2 Existing industrial relations performance is analysed in relation to strategic IR objectives |
| | 1.3 *Performance gaps* are identified by the management team |
| | 1.4 Options are evaluated in terms of *cost benefit* and *risk analyses* |
| | 1.5 Industrial relations strategies/policies are agreed within the management team |
| | 1.6 Options to eliminate the gaps over the *short to medium term* are developed |
| 2. Industrial relations strategies/policies and plans are implemented | 2.1 An *implementation plan* for the IR strategies/policies is developed by the management team |
| | 2.2 The implementation plan includes risk analyses and *contingency plans* |
| | 2.3 Training and development is provided where appropriate to support the IR plan |
| | 2.4 *Contingency plans* are prepared in the event that negotiations break down |
| | 2.5 Negotiations are undertaken between *employer representatives* and *employee representatives*, to agree to changes required by either group |
| | 2.6 Agreed outcomes of negotiations are documented and *certified* in the relevant jurisdiction where appropriate |
| | 2.7 Breakdowns in negotiations are managed in accordance with the organisation's IR strategies/policies and *legal requirements* |
| | 2.8 Outcomes of agreements are monitored and evaluated |

| Element | Performance Criteria |
|---|---|
| | 2.9    Remedial action is taken where groups or individuals fail to abide by agreements |
| 3.    Manage conflict | 3.1    Problem solving/grievance procedures are agreed and documented |
| | 3.2    Individuals are trained in *conflict management techniques* |
| | 3.3    Procedures are in place to ensure early advice/notification of grievances/conflicts/disputes within the organisation |
| | 3.4    Causes of conflict/grievance are identified and alleviated/eliminated in accordance with organisational policies and legal requirements |
| | 3.5    *Disputes resolution procedures* are followed with referral to external bodies as a last resort |
| | 3.6    Specialist/expert advice is sought and considered where appropriate |
| | 3.7    The organisation's position is strongly *advocated* by appropriate representatives both internally and within relevant jurisdiction |
| | 3.8    Workplaces are monitored to minimise dysfunctional conflict |
| | 3.9    *Conflict management procedures* are regularly reviewed and improved where appropriate |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br><br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br><br>• relevant industry codes of practice |
| **OHS considerations may include:** | • establishment and maintenance of OHS training, records, induction processes<br><br>• performance against OHS legislation and organisation's OHS system, especially policies, procedures and work instructions |

## Range Statement

| | |
|---|---|
| **Long term industrial relations objectives may include:** | • developing and maintaining the commitment of employees to workplace reform |
| | • promoting more effective communication throughout the organisation |
| | • achieving successful outcomes from negotiation and maintaining consultative processes with groups and individuals both inside and outside the organisation |
| | • effective management of grievances, conflict situations and dispute resolution procedures |
| | • introducing on-going workplace reform |
| **Performance gaps means:** | • situations where outcomes are less then those stated in the strategic objectives and may include: |
| |    • lost time disputes |
| |    • work bans/go slow |
| |    • disruptive conflict |
| |    • low/high turnover of labour |
| |    • external interference |
| |    • quality/OHS/environmental failure |
| |    • productivity below budget |
| |    • costs above budget |
| |    • failure to meet strategic and/or operational objectives |
| **Cost benefit analysis means:** | • a calculation to determine whether the results/outcomes of a particular course of action are sufficient to justify the costs and risks in taking that action |
| **Risk analysis means:** | • a determination of the likelihood of a negative event preventing the organisation meeting its objectives and the likely consequences of such an event on organisational performance |
| **Short to medium term means:** | • from the present to the period extending over the next 12 months |
| **Implementation plan may include:** | • documented objectives, methodology and time frame |
| | • project plan |

## Range Statement

| | |
|---|---|
| **Contingency plan may cover:** | • unpredicted staff shortages<br>• unpredicted customer demand<br>• accidents or emergencies<br>• legal action/protection |
| **Employer representative may include:** | • line manager<br>• internal/external HR expert<br>• internal/external IR expert<br>• employer associations |
| **Employee representative may include:** | • employee chosen by peer<br>• union delegate<br>• union organiser/official |
| **Certified means:** | • Australian Workplace Agreements<br>• workplace and enterprise bargaining agreements |
| **Legal requirements means:** | • all relevant state and federal legislation, regulations, awards and agreements |
| **Conflict management techniques/procedures may include those which deal with:** | • dispute resolution procedures<br>• negotiating/bargaining<br>• controlling difficult situations using legal remedies |
| **Disputes resolution procedures may include:** | • informal organisational processes<br>• organisational policies/processes<br>• procedures enforceable under an award, agreement or Act of Parliament |
| **Advocated may include:** | • written or oral advocacy<br>• informal and formal |

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Actual performance of the negotiation/conflict management role<br>• Well organised development and documentation of strategies and plans which address all of the relevant |

# Evidence Guide

IR matters between the organisation and its employees and clearly identify areas for improvement/reform

- Negotiation and conflict management skills which are able to deliver predetermined organisational outcomes

**Underpinning Knowledge***

\* At this level the learner must demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas.

- Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination
- Industrial relations as a concept within an organisational context
- Workplace reform in a best practice context
- Role of employee representatives and employee organisations
- Case preparation and presentation techniques
- Negotiation and mediation techniques
- Relevant state and federal industrial relations systems
- Enterprise and workplace bargaining
- Changing economic, social, demographic, labour market conditions and educational trends
- Human resource strategy and planning
- Industrial relations policies and practices

**Underpinning Skills**

- Consultative and negotiation skills to develop IR strategies and implement them
- Project management skills to manage workplace reform and development of certified agreements
- Counselling skills where individuals are involved in conflict situations
- Communication skills to impart and explain knowledge on IR matters to managers and employees
- Debating and advocacy skills to put forward organisation's support of company objectives, both informally and in relevant jurisdictions
- Facilitation skills to work with groups to achieve consensus outcomes to problems in the workplace
- Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

**Resource Implications**

- The learner and trainer should have access to appropriate documentation and resources normally used in the workplace

# Evidence Guide

| | |
|---|---|
| **Consistency of Performance** | • In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:    These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information** — to prepare for negotiations
- **Communicating ideas and information** — to assist in the understanding of IR concepts
- **Planning and organising activities** — to implement IR strategies
- **Working with teams and others** — to aid the negotiation process
- **Using mathematical ideas and techniques** — to analyse data
- **Solving problems** — to minimise the impact of grievances and disputes
- **Using technology** — to aid communication and record keeping

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBHR506A Manage recruitment selection and induction processes

| | |
|---|---|
| **Unit Descriptor** | This unit covers all aspects of the recruitment selection and induction processes from the perspective of an HR manager responsible for ensuring the organisation undertakes these processes in accordance with predetermined policies and procedures. |
| | This unit is related to BSBHR402A Recruit and select personnel |
| | |
| **Competency Field** | Human Resource Management |

| **Element** | **Performance Criteria** |
|---|---|
| 1. Develop recruitment selection and induction processes | 1.1 Strategic and operational plans and policies are analysed to identify relevant policies and objectives |
| | 1.2 *Recruitment and selection processes* and relevant documents are developed |
| | 1.3 Appropriate technology is employed to improve the efficiency and effectiveness of the recruitment/selection process |
| | 1.4 Specialists are utilised for those parts of the process which are necessary |
| | 1.5 Content and methodology for induction processes are agreed and documented (induction plan) |
| | 1.6 Forms, procedures and induction processes are trialled and measured against objectives |
| | 1.7 *Performance gaps* are analysed and improvements introduced prior to implementation |
| 2. Recruitment and selection of staff | 2.1 Future human resource needs are determined in collaboration with *relevant managers and sections* |
| | 2.2 Position descriptors and person specifications for vacancies are provided to *relevant managers* and updated where appropriate |
| | 2.3 Training and assistance is provided to all persons involved in the recruitment/selection process |
| | 2.4 Vacant positions are *advertised* in accordance with organisational policy and advertisements meet all legal requirements |
| | 2.5 Selection procedures are implemented in accordance with organisational policy and legal requirements |
| | 2.6 Applicants are advised of selection outcome |
| | 2.7 Terms and conditions of employment and *probation period* are advised to successful applicants |

| Element | Performance Criteria |
|---------|---------------------|
| 3.   Manage induction of staff | 3.1   Training and assistance is provided to all persons engaged in inducting staff |
| | 3.2   Induction is undertaken in accordance with the induction plan |
| | 3.3   Employees are assessed at the completion of the induction program |
| | 3.4   Feedback is obtained from participants and relevant managers on the extent to which the induction process is meeting its objectives |
| | 3.5   Improvements are introduced to the induction process in accordance with feedback received and organisational policies |
| | 3.6   Probationary employees are performance managed and provided with feedback until their employment is confirmed |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| **OHS considerations may include:** | • establishment and maintenance of OHS training, records, induction processes |
| | • performance against OHS legislation and organisation's OHS system, especially policies, procedures and work instructions |

## Range Statement

| | |
|---|---|
| **Recruitment and selection processes may include:** | • job analysis<br>• job description<br>• job evaluation<br>• recruitment advertising<br>• use of external agencies<br>• application processing<br>• competency profiling<br>• job classifications, assessment centres<br>• psychometric assessment<br>• commercial software packages to improve efficiency in recruitment and selection processes |
| **Performance gaps may include:** | • situations where outcomes are less then those stated in the strategic objectives and may include:<br>  • lost time disputes<br>  • work bans/go slow<br>  • disruptive conflict<br>  • low/high turnover of labour<br>  • external interference<br>  • quality/OHS/environmental failure<br>  • productivity below budget<br>  • costs above budget<br>  • failure to meet strategic and/or operational objectives |
| **Relevant managers and sections means:** | • those who have a role in the recruitment selection or induction processes |
| **Advertisements may include:** | • internal bulletin<br>• internal notice board<br>• newspaper<br>• radio<br>• television<br>• internet<br>• recruitment agencies |
| **Probation period means:** | • the period from the date of appointment until the employee is confirmed in their employment, during which regular performance feedback and relevant training and development occurs |

# Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • The integrated demonstration of all elements and their performance criteria |
| | • The establishment of effective recruitment and selection processes which facilitate the supply of human resources matched to organisational needs |
| **Underpinning Knowledge\*** <br> \* At this level the learner must demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas. | • Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • Relevant terms and conditions of employment |
| | • Recruitment and selection methods, including assessment centres |
| | • Reliability and validity as applied to recruitment and selection methods |
| | • Understanding of psychometric and skills testing programs |
| | • Concept of outsourcing |
| | • Employee contracts |
| | • Internet-based recruitment |
| | • Industrial relations systems |
| | • Changing economic, social, demographic, labour market conditions and educational trends |
| | • Understanding of the organisation's strategic goals, policies and procedures, and their implications for future human resource requirements |
| | • Human resource strategy and planning |
| | • Understanding of the concept of diversity |
| | • EEO |
| **Underpinning Skills** | • Consultation skills to consult with other managers regarding recruitment/selection/induction requirements |
| | • Internal and external marketing skills to attract applicants to apply for vacant positions |
| | • Technology skills to access information and to select and use appropriate technology to assist in the recruitment process |
| | • Negotiation skills to negotiate terms and conditions of employment |

# Evidence Guide

|  |  |
|---|---|
|  | • Communication skills to advise potential applicants about positions and answer inquiries |
|  | • Interviewing skills to participate in/support managers in selection interviewing |
|  | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | • The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | • In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
|  | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
|  | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
|  | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:* *These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information —** to develop, co-ordinate and implement processes to recruit and select human resources to meet organisational needs

- **Communicating ideas and information —** to consult with managers to develop recruitment and selection plans

- **Planning and organising activities —** to facilitate the selection processes

- **Working with teams and others —** to deliver effective induction programs

- **Using mathematical ideas and techniques —** to aid planning

- **Solving problems —** to ensure both managers and new employees are satisfied with the outcomes

- **Using technology —** to aid communication and enhance recruitment and selection process

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBMGT503A Prepare budgets and financial plans

| | |
|---|---|
| **Unit Descriptor** | This unit covers the preparation of financial plans and budgets by operational/non-financial managers, as required by their particular organisation. |
| | This unit is related to BSBMGT504A Manage budgets and financial plans |
| | |
| **Competency Field** | Business Management Services |

| **Element** | **Performance Criteria** | |
|---|---|---|
| 1. Analyse strategic and operational plans | 1.1 | *Strategic opportunities* are expressed in terms of tactical and operational objective*s* |
| | 1.2 | Tactical and operational objectives are converted into special projects or work programs |
| | 1.3 | Financial trends are analysed and interpreted in the context of the organisational strategic objectives |
| | 1.4 | Financial planning objectives, process timeframes and resources are clearly identified |
| 2. Develop revenue, expenditure and capital investment proposals | 2.1 | Individuals and groups are given responsibility for the development of specific *budgets and plans* |
| | 2.2 | Consultation occurs with all *relevant groups and individuals* throughout the organisation |
| | 2.3 | Proposals are developed taking account of past experience, present trends and future expectations |
| | 2.4 | Outcomes of proposals are clearly linked to organisational strategic objectives |
| | 2.5 | Realistic cost benefit and risk analyses/management plans are incorporated into all proposals |
| | 2.6 | Organisational *investment target rates* are met for *capital expenditure* proposals |
| | 2.7 | Performance measures and tactics for monitoring and control processes are identified for each proposal/action |
| | 2.8 | Proposals comply with the organisation's *values, policies, Code of Conduct, legal and ethical obligations* |
| | 2.9 | Proposals are developed within the agreed timeframes |
| | 2.10 | *Supporting evidence* is valid and sufficient to allow proper evaluation of the proposals |

| Element | Performance Criteria |
|---|---|
| 3. Build agreement for budgets and financial plans | 3.1 Negotiation is undertaken with relevant groups and individuals in ways that build commitment to the plans |
| | 3.2 Links to the achievement of organisational strategic objectives are identified and agreed |
| | 3.3 Outcomes are confirmed in terms of clear, concise objectives and timeframes |
| | 3.4 Negotiations lead to a clear agreement of those matters to be incorporated into *budgets and plans* |
| | 3.5 *Budgets and plans* incorporate the outcomes of negotiations and meet organisation's approval processes |
| | 3.6 *Delegations, accountabilities and responsibilities* are agreed and confirmed in writing |
| | 3.7 Final *budget and plans* are clearly documented and a communication plan developed |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| **Strategic opportunities may include:** | • new product/service development |
| | • new models/revisions of products/services |
| | • expansion/contraction of operational activities |
| | • alliances/joint ventures |
| | • outsourcing/in-sourcing |
| **Budgets and plans may include:** | • operation/production budgets |
| | • financial budgets |
| | • sales budgets |
| | • capital expenditure budgets |
| | • cash flow plans |

## Range Statement

| | |
|---|---|
| **Relevant groups and individuals means:** | • all personnel within the organisation affected by the budgets and financial plans being developed |
| **Investment target rates refers to:** | • the minimum percentage rate of return required by the organisation for a capital investment project to proceed |
| **Capital expenditure means:** | • those components of the budget which, for internal policy reasons, are considered to provide benefits over more than one financial period and are to be evaluated as capital expenditure projects |
| **Legal and ethical obligations means:** | • compliance with all relevant statutes, regulations and audit requirements of the organisation, along with the organisation's policies and values |
| **Supporting evidence may include:** | • cost/benefit analyses |
| | • risk management plans |
| | • market research results |
| | • net present value |
| | • interest rate of return |
| | • pay pack calculations |
| **Delegations means:** | • the decision-making accountabilities relating to the person's position description and/or other written and verbal delegations |
| **Accountabilities and responsibilities means:** | • clarification of who is to be accountable for a decision or action prior to its execution, and identification of groups, individuals and activities for which a person is responsible for managing |

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Each of the elements needs to be clearly evidenced, both in terms of outcome and process, but this can be achieved through a holistic project approach to assessment |
| | • Evidence needs to determine that people not only have done and can do what is required, but that they understand why these activities need to be undertaken |

# Evidence Guide

- Evidence of preparation and negotiation of proposed with clear links to strategic and operational plans

**OHS considerations
may include:**

- sufficient resources for OHS in strategic and operational plans
- proposals include OHS risk assessment and control
- proposals meet OHS legislative requirements and address organisational OHS objectives

**Underpinning Knowledge***
\* At this level the learner must demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas.

- Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination
- Financial planning within the organisation
- Budgeting
- Organisation's objectives and plans (strategic, tactical and operational)
- Consultative methods and processes
- Capital investment evaluation techniques
- Performance measurement
- Organisation roles in respect to financial delegations, accountabilities and responsibilities
- Standards for organisational record-keeping and audit requirements

**Underpinning Skills**

- Analytical skills to analyse and interpret relevant financial information
- Financial planning skills to develop formal estimates of reviews, costs, cash flows and logistic requirements
- Communication/consultation skills to ensure all relevant groups and individuals are advised of what is occurring and are provided with an opportunity for input
- Cost and benefit analysis skills to produce balanced arguments to support financial proposals
- Risk management skills to assess probability and consequences of any potential negative event
- Investment analysis skills to evaluate capital expenditure proposals (NPV, IROR, etc)
- Negotiation skills to negotiate agreement on budgets and financial plans with the relevant managers
- Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

## Evidence Guide

| | |
|---|---|
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

### Key Competency Levels

*NB:    These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.
1. Perform        2. Administer        3. Design
- **Collecting, analysing and organising information —** to support budget proposals
- **Communicating ideas and information —** to develop a communication plan for the budget
- **Planning and organising activities —** to develop budgets
- **Working with teams and others —** to ensure appropriate groups and individuals participate in the process
- **Using mathematical ideas and techniques —** to build the budget and other financial plans
- **Solving problems —** to successfully negotiate commitment to the plans
- **Using technology —** to assemble the plans and communicate them to users of the plans

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBMGT504A Manage budgets and financial plans

| **Unit Descriptor** | This unit covers all of the significant aspects of financial management for operational managers who are not financial specialists. It emphasises the preparation of users of budgets/financial plans through communication and training and consistent surveillance over budget performance, with early intervention where required. |
| --- | --- |
| | Consider co-assessment with BSBMGT503A Prepare budgets and financial plans. |

| **Competency Field** | Business Management Services |
| --- | --- |

| **Element** | **Performance Criteria** | |
| --- | --- | --- |
| 1. Communicate budget and financial plans | 1.1 | Budget/financial plan communication package reviewed by finance specialists |
| | 1.2 | Package is amended/revised where appropriate |
| | 1.3 | *Training activities* are undertaken with users of the budget and plans across the organisation |
| | 1.4 | All data and terms are defined and understood by the users of the plans |
| | 1.5 | Communication outcomes are tested to ensure clear understanding of objectives, processes and accountabilities |
| 2. Monitor and control activities against plans | 2.1 | *Delegations and budget accountabilities* are confirmed in writing prior to budget period |
| | 2.2 | Funds are allocated in accordance with budget objectives and parameters |
| | 2.3 | Recording systems and documentation meet all *audit requirements* and legal obligations |
| | 2.4 | *Risk management* plans are implemented and contingency plans in place for all financial plans |
| | 2.5 | Performance is monitored and variances identified on a *real time* basis |
| | 2.6 | Variances are analysed in conjunction with relevant experts to determine cause and effect |
| | 2.7 | Remedial action is taken swiftly to minimise negative impact and maximise benefits |
| | 2.8 | Budgets and plans are renegotiated/restructured where necessary to optimise organisational performance |
| 3. Report outcomes of financial plans | 3.1 | Records of financial performance are properly maintained within organisational systems |

| Element | Performance Criteria |
|---------|---------------------|
| | 3.2 Financial performance is analysed and reported in a form and language appropriate to the audience |
| | 3.3 *Non financial objectives* are reported in the context of overall organisational performance |
| | 3.4 Strategies and plans are reviewed and updated to optimise organisational performance |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| **Training activities may include:** | • small group discussions |
| | • informal meetings |
| | • formal, structured competency standards/training |
| | • tele and video conferencing |
| | • e-learning |
| **Delegations and budget accountabilities may include:** | • monitoring expenditure |
| | • authorising expenditure within limits |
| | • reporting on variances to budget/plan |
| | • taking remedial action within budget authority |
| **Audit requirements refer to:** | • the internal standards required in the management of budgets and financial plans, approved by external/internal auditors |
| **Risk management means:** | • the process of identification of potential negative events and the development of plans to mitigate or minimise the likelihood of the negative event occurring and/or the consequences in the event it does occur |

## Range Statement

| **Real time refers to:** | • on-line, instantaneous monitoring of performance/activities |
|---|---|
| **Appropriate non financial objectives may include:** | • environmental |
| | • OHS |
| | • quality |
| | • market share |
| | • customer service |
| | • security or any other key result area |

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| **Critical Aspects of Evidence** | • Evidence must cover all aspects of business operations in which financial management and decision-making occurs. Period activities relating to revenue expenditure and cash flow management, as well as capital expenditure proposals and capital budgeting, must be incorporated into the assessment |
|---|---|
| | • The role of the operational manager as a communicator and trainer in respect to the implementation of the budget needs, also must be integrated into the overall assessment, along with regular and quality reporting of budget performance |
| | • Evidence of analysis of budget performance and follow up action |
| **OHS considerations may include:** | • establishment and maintenance of OHS records |
| | • assessment of OHS performance in financial and non-financial terms |
| **Underpinning Knowledge\*** | • Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| \*At this level the learner must demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas. | • Financial planning within the organisation |
| | • Budgeting |
| | • Organisation's objectives and plans (strategic, tactical and operational) |
| | • Consultative methods and processes |

## Evidence Guide

|  | • Capital investment evaluation techniques |
|  | • Performance measurement |
|  | • Organisation roles in respect to financial delegations, accountabilities and responsibilities |
|  | • Standards for organisational record-keeping and audit requirements |

| **Underpinning Skills** | • Financial planning skills to develop formal estimates of reviews, costs, cash flows and logistic requirements |
|  | • Communication and training skills to ensure team members and other managers understand the budget/financial planning objectives and processes |
|  | • Risk management skills to assess probability and consequences of any potential negative event |
|  | • Analysis skills to interpret positive and negative variances from budget/plan, determine the reasons therefore, and identify potential actions to remediate the situation |
|  | • Systems management skills to ensure financial performance records are collected, maintained and properly reported |
|  | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |

| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |

| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |

| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
|  | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
|  | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |

## Evidence Guide

- Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit

## Key Competency Levels

*NB:     These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information —** to monitor budget performance
- **Communicating ideas and information —** to ensure the budget and its impact on people is understood
- **Planning and organising activities —** to train users in the elements of the budget which affect them
- **Working with teams and others —** to review budget performance
- **Using mathematical ideas and techniques —** to measure budget performance, calculate variances and present outcomes
- **Solving problems —** to maintain operations within budget
- **Using technology —** to manage budget performance and develop performance reports

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

## BSBMGT505A Ensure a safe workplace

| | |
|---|---|
| **Unit Descriptor** | This unit has been adapted from Generic Competency C in the *National Guidelines for Integrating Occupational Health and Safety Competencies into National Industry Competency Standards* [NOHSC:7025 (1998) 2nd edition]. |
| | It is relevant for those with managerial responsibilities, either as an owner or employee manager, of a business. |
| | The unit is concerned with establishing, maintaining and evaluating the organisation's OHS policies, procedures and programs in the relevant work area in accordance with OHS legal requirements. All those who have (or are likely to have) a management responsibility for OHS should undertake this unit. |
| | This unit is related to BSBMGT603A Review and develop business plans, BSBMGT604A Manage business operations, BSBMGT608A Manage innovation and continuous improvement, BSBMGT609A Manage risk and BSBMGT610A Manage environmental management systems. |

| | |
|---|---|
| **Competency Field** | Business Management Services |

| Element | Performance Criteria |
|---|---|
| 1. Establish and maintain an Occupational Health and Safety system | 1.1 OHS policies are developed which clearly express the organisation's commitment to implement relevant *Occupational Health and Safety legislation* in the enterprise |
| | 1.2 OHS *responsibilities* for all workplace personnel are defined to allow implementation of OHS policies, procedures and programs |
| | 1.3 Financial and human resources for the effective operation of the OHS system are identified and provided |
| | 1.4 Information on the OHS system and its operational procedures is provided and explained to employees |
| 2. Establish and maintain participative arrangements for the management of OHS | 2.1 *Participative arrangements* are established and maintained with employees and their representatives in accordance with relevant OHS legislation |
| | 2.2 Issues raised through participative arrangements and consultation are dealt with and resolved promptly and effectively in accordance with procedures for issue resolution |
| | 2.3 Information about the outcomes of participation and consultation is provided in a manner accessible to employees promptly |

| Element | Performance Criteria |
|---|---|
| 3. Establish and maintain procedures for identifying hazards, and assessing and controlling risks | 3.1 Procedures for ongoing hazard identification and assessment & control of associated risks are developed |
| | 3.2 Hazard identification is addressed at the planning, design and evaluation stages of any change in the workplace to ensure that new hazards are not created by the proposed changes |
| | 3.3 Procedures for selection and implementation of risk control measures in accordance with the hierarchy of control are developed and maintained |
| | 3.4 Inadequacies in existing risk control measures are identified in accordance with the hierarchy of control and resources enabling implementation of new measures are provided promptly |
| 4. Establish and maintain a quality OHS management system | 4.1 An OHS induction and training program is developed and provided for all employees as part of the organisation's training program |
| | 4.2 A system for *Occupational Health and Safety record keeping* is established and maintained to allow identification of patterns of occupational injury and disease in the organisation |
| | 4.3 Measurement and evaluation of the OHS system is undertaken in line with the organisation's Quality Systems' framework |
| | 4.4 Improvements to the OHS system are developed and implemented to achieve organisational OHS objectives |
| | 4.5 Compliance with the OHS legislative framework is assessed to ensure that legal OHS standards are maintained as a minimum |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |

## Range Statement

| | |
|---|---|
| **OHS legislation will depend on state and territory legislation and requirements and will include:** | • common law duties to meet general duty of care requirements |
| | • regulations and approved codes of practice relating to hazards in work area |
| | • requirements for establishment of consultative arrangements including those for health and safety representatives and Health and Safety committees |
| | • requirements for effective management of hazards |
| | • requirements for provision of information and training including training in safe operating procedures, procedures for workplace hazards, hazard identification, risk assessment and risk control and emergency and evacuation procedures |
| | • requirements for the maintenance and confidentiality of records of occupational injury and disease |
| **Establishment and maintenance of arrangements for management of OHS in the organisation may include:** | • obtaining expert OHS advice as required |
| | • consultation |
| | • designing safe operations and systems of work |
| | • provision of information and training |
| | • specific hazard management policies and procedures for: |
| |     • hazard reporting by employees |
| |     • hazard identification |
| |     • assessment of risks associated with identified hazards |
| | • control of risks in accordance with the hierarchy of control namely: |
| |     • elimination |
| |     • engineering |
| |     • administrative |
| |     • personal protective equipment |
| |     • workplace inspections including plant and equipment |
| |     • OHS records' maintenance and analysis |
| |     • housekeeping and storage |
| |     • purchasing of supplies and equipment |
| |     • issue resolution |
| |     • counselling/disciplinary processes |
| **Organisational health and safety record-keeping may relate to:** | • audit and inspection reports |
| | • workplace environmental monitoring records |

# Range Statement

- consultation, e.g. meetings of Health and Safety Committees, work group meeting agendas including OHS items and actions
- induction, instruction and training
- manufacturer's and supplier's information including dangerous goods storage lists
- hazardous substances registers
- plant and equipment maintenance and testing reports
- workers compensation and rehabilitation records
- First Aid/medical post records

# Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

**Critical Aspects of Evidence**

- Detailed knowledge and application of all relevant OHS legislative frameworks
- Principles and practice of effective OHS management in a small, medium or large business
- Establishment and maintenance of arrangements for managing OHS within the organisations' business systems and practices
- Identification of intervention points for expert OHS advice
- Detailed knowledge of workforce characteristics and how they impact on the design and maintenance of OHS in the organisation

**Underpinning Knowledge\***

\* At this level the learner must demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas.

- Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination
- Understanding the principles and practices of effective OHS management
- Understanding of the application of the hierarchy of control (the preferred order of risk control measures from most to least preferred, that is, elimination, engineering controls, administrative controls, personal protective equipment)
- Knowledge of relevant OHS legislative frameworks
- Understanding the principles and techniques associated with modelling safe work practices, hazard

# Evidence Guide

identification and risk management

- Knowledge of how to develop and promote a safety culture
- Understanding how to provide and arrange support so individuals/groups are competent to fulfil workplace requirements
- Understanding the actual and potential workplace and environmental impact of non-conformance
- Knowledge of facilitating incident investigation and process improvement
- Knowledge non-conformance reporting requirements
- Prepare and negotiate reports and recommendations to improve safety
- Knowledge of literacy levels and communication skills of work group members and consequent suitable communication techniques

**Underpinning Skills**

- Ability to analyse the working environment in order to identify hazards, assess risks and control risks
- Ability to analyse relevant workplace data in order to identify hazards, assess and control risks
- Ability to analyse relevant workplace data in order to evaluate effectiveness of the OHS management system
- Functional literacy skills to access and use workplace information
- Communication skills including researching and analysing information, reporting
- Interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds
- Problem-solving skills to deal with complex and non-routine difficulties
- Team work skills to work effectively with teams/groups
- Consultation skills to effectively consult with colleagues
- Select and use technology skills at the appropriate level
- Coaching and mentoring skills to provide support to colleagues
- Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

## Evidence Guide

**Resource Implications**       The learner and trainer should have access to appropriate documentation and resources normally used in the workplace

**Consistency of Performance**   In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations

**Context/s of Assessment**
- Competency is demonstrated by performance of all stated criteria including the Evidence Guide and the Range Statement applicable to the workplace
- Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package
- Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment
- Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit

## Key Competency Levels

*NB:   These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform       2. Administer       3. Design

- **Collecting, analysing and organising information** — to obtain information to advise colleagues of safety responsibilities
- **Communicating ideas and information** — to resolve safety issues with work team
- **Planning and organising activities** — to plan resource requirements
- **Working with teams and others** — to consult on the control of risk
- **Using mathematical ideas and techniques** — to calculate resource requirements
- **Solving problems** — to investigate improved work methods
- **Using technology** — to use computing systems to access safety information

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBMGT506A Recruit, select and induct staff

**Unit Descriptor**     This unit covers all aspects of selection and recruitment relevant to managers who are not specialists in the area. It ensures that managers engage in appropriate planning and that selection and induction leads to the recruitment and retention of high quality staff. This unit is almost essential for those who now have (or are likely to have) an involvement in or responsibility for recruiting, selecting and/or inducting staff.

**Competency Field**     Business Management Services

| Element | Performance Criteria |
|---|---|
| 1.  Determine future people needs | 1.1  Planning for future people requirements is consistent with strategic and operational plans |
| | 1.2  Consultation occurs with all appropriate managers and sections |
| | 1.3  *Position descriptions*, *person specifications* and criteria for selection are developed and approved |
| | 1.4  *Position descriptions* and *person specifications* comply with all *organisational and legal requirements* |
| 2.  Select appropriate people | 2.1  Persons involved in assessment/selection process are appropriate for the position |
| | 2.2  Candidates are assessed against *pre-agreed selection criteria* |
| | 2.3  Selection decisions are based on *performance based selection techniques* and direct evidence |
| | 2.4  Candidates all receive feedback through the process |
| | 2.5  Record-keeping complies with organisational and legal requirements |
| 3.  Confirm employment arrangements | 3.1  Inform relevant people of the selection decision and prepare development plan based on selection process |
| | 3.2  *Conditions of employment* as approved for the position are agreed with the successful candidate |
| | 3.3  Induction arrangements are agreed with the candidate and other relevant managers |
| | 3.4  Induction is undertaken in accordance with the induction plan and a training plan developed |

# Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br><br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br><br>• relevant industry codes of practice |
| **Position description refers to:** | • a written statement of the duties, tasks and responsibilities for a particular job or position |
| **Person specification refers to:** | • a written statement of the skills, knowledge, attitude, aptitudes and experience required for a particular job or position |
| **Organisational and legal requirements means:** | • compliance with all relevant statutes, regulations and audit requirements of the organisation, along with the organisation's policies and values |
| **Pre-agreed selection criteria may include:** | • educational qualifications<br><br>• statutory qualifications/certificates<br><br>• competencies required (including interpersonal skills)<br><br>• potential for growth<br><br>• essential experience<br><br>• desirable experience<br><br>• ability to work in the particular environment |
| **Performance based selection techniques may include:** | • in-basket<br><br>• case studies<br><br>• scenarios<br><br>• simulations<br><br>• actual performance<br><br>• skills/knowledge testing<br><br>• an assessment centre (with some or all of the above) |

## Range Statement

| | |
|---|---|
| **Conditions of employment may include:** | • salary/wages<br>• penalty rates<br>• holidays and leave entitlements<br>• superannuation<br>• hours of work<br>• grievance procedures |

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • The evidence should clearly demonstrate that the required planning and preparatory processes have been undertaken<br>• It should also evidence actual interviewing and the use of performance based selection techniques<br>• Induction should be observed by the assessor to ensure the competence of the individual to follow an induction plan which is clearly established |
| **OHS considerations may include:** | • national, state/territory legislative requirements especially in regard to OHS<br>• industry codes of practice |
| **Underpinning Knowledge\***<br><br>\* At this level the learner must demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas. | • Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• Consultation processes and methods<br>• Succession planning/HR planning<br>• Organisation policies and procedures<br>• Legal requirements<br>• Performance based selection techniques<br>• Organisational requirements for record-keeping and documentation<br>• Award agreements, contracts of employment (including conditions) |

# Evidence Guide

| | |
|---|---|
| **Underpinning Skills** | • Communication/consultation skills to ensure all relevant groups and individuals are advised of what is occurring and are provided with an opportunity for input |
| | • Developing position descriptors/person specifications for positions for which they are responsible |
| | • Developing selection criteria |
| | • Designing an appropriate competency based and performance based selection plan |
| | • Induction/training skills to prepare direct reports for the safe and efficient performance of their job |
| | • Interviewing skills to participate in selection interviews as required |
| | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:   These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 1 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information —** to prepare for the selection interviews/activities
- **Communicating ideas and information —** to ensure the candidates fit the organisation
- **Planning and organising activities —** to ensure the selection processes go smoothly
- **Working with teams and others —** to take advice from Human Resource specialists where appropriate
- **Using mathematical ideas and techniques —** to calculate weightings/score an interview
- **Solving problems —** to determine short-listing of suitable candidates
- **Using technology —** to help select candidates on a competence/performance based assessment

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBMGT603A Review and develop business plans

| | |
|---|---|
| **Unit Descriptor** | This unit covers those areas of business planning and system review undertaken by an operational manager and incorporates the development of various tactical and operational plans incorporating risk management plans.<br><br>Consider co-assessment with BSBMGT604A Manage business operations |
| **Competency Field** | Business Management Services |

| **Element** | **Performance Criteria** |
|---|---|
| 1. Develop tactical and operational plans | 1.1 Pre-existing *tactical and operational plans* have been reviewed and evaluated |
| | 1.2 Strategic objectives are analysed, interpreted and relevant operational objectives are developed |
| | 1.3 *Project management protocols* for the organisation are developed |
| | 1.4 Consultation with appropriate groups and individuals is built into plans |
| | 1.5 Requirements of internal/external customers are identified through consultation and documented |
| | 1.6 Plans include methods for measuring customer satisfaction and obtaining feedback |
| | 1.7 Operational performance objectives, measures and criteria are developed through consultation with relevant groups and individuals |
| | 1.8 Tactical and operational plans identify financial, human and physical resource requirements |
| | 1.9 Scheduling of activities meets customer/marketing requirements |
| | 1.10 Plans contain clear profitability, productivity and performance targets for key result areas (e.g. OHS, environment, quality, customer service) |
| | 1.11 Plans are concise, logical and comply with organisation requirements |
| | 1.12 Plans address all relevant operational issues, including internal/external environmental factors |
| | 1.13 *Tactical and operational plans* have been subject to risk assessment and analyses, and include *risk management plans* |
| 2. Review business systems | 2.1 Reviews are undertaken regularly of the implementation of tactical and operational plans |

| Element | Performance Criteria |
|---------|---------------------|

2.2  Information/reports are available to compare plans, budgets and forecasts to actual performance

2.3  *Systems* are reviewed in consultation with users and people responsible for implementing the business plans

2.4  *Systems* provide for identification of system variance or failure, to allow early intervention and prompt remediation

2.5  *Systems* monitor resource usage in a timely manner

2.6  *Systems* allow for flexible responses to changing and emerging situations

2.7  *Systems* are in place to provide feedback to relevant groups and individuals on their performance

2.8  *Systems* provide for immediate response to incidents involving potential risk to people, product or the environment

2.9  *Systems* are designed to achieve the organisation's energy saving targets

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br><br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br><br>• relevant industry codes of practice |
| **Tactical and operational plans means:** | • plans to fine-tune a strategy. It involves less organisational resources and is usually relatively easy to implement or reverse. They include the plans for specific tactical responses to the marketplace and the day-to-day plans associated with the production and delivery of a product or service |
| **Project management protocols means:** | • the rules of behaviour relating to the development, planning, approval, implementation, management and evaluation of projects |

## Range Statement

| | |
|---|---|
| **Risk management means:** | • the process of identification of potential negative events and the development of plans to mitigate or minimise the likelihood of the negative event occurring and/or the consequences in the event it does occur |
| **Systems means:** | • a detailed description/depiction of how organisations relate to their environments and how they process information through strategic and tactical management to develop actual operating procedures |
| **Electronic commerce refers to:** | • business-to-business, business-to-consumer, government to business activities conducted via electronic communication methodologies and networks |
| | • cost centre/department — to cost centre/department |

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Assessment for this unit will need to occur over a sufficient period of time to allow an holistic assessment of the tactical and operational planning activities |
| | • Plans developed must meet the organisation's criteria as well as those set down in the unit |
| | • Systems review and revision is a crucial aspect of the business planning process and needs to be clearly evidenced |
| **OHS considerations may include:** | • review and evaluation of previous OHS plans and programs |
| | • implementation of OHS systems for projects |
| | • use of participative arrangements for review of OHS in operational performance |
| | • development and review of OHS performance targets |
| | • framework and components of OHS management system, its structures and performance |
| | • systemic review procedures |

# Evidence Guide

| | |
|---|---|
| **Underpinning Knowledge***<br><br>* At this level the learner must demonstrate understanding of specialised knowledge with depth in some areas. | • Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• Strategic planning<br>• All legislation relevant to the organisation's operation<br>• Critical path/PERT methodology<br>• Relevant industrial awards and agreements<br>• Electronic commerce systems<br>• Consultative methods and processes<br>• Performance measurement and benchmarking methodology<br>• Operations management<br>• High reliability organisational concepts<br>• Energy management<br>• Capital investment evaluative methodology including NPV and ROI |
| **Underpinning Skills** | • Analytical skills to interpret strategic objectives and develop tactical and operational objectives<br>• Communication/consultation skills to ensure all relevant groups and individuals are advised of what is occurring and are provided with an opportunity for input<br>• Risk management skills to analyse, identify and develop mitigation strategies for identified risks<br>• Systems analysis and design skills to ensure that system outputs meet tactical/operational objectives and measure performance in a timely way<br>• Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |

## Evidence Guide

| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
|---|---|
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

**Key Competency Levels**

*NB:    These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

• **Collecting, analysing and organising information —** to prepare the tactical and operational plans

• **Communicating ideas and information —** to internal/external customers and review systems

• **Planning and organising activities —** to develop plans and review/redesign systems

• **Working with teams and others —** to consult with them and obtain their input into planning and system review activities

• **Using mathematical ideas and techniques —** to ensure appropriate measurement activities are in place

• **Solving problems —** to improve existing systems and achieve tactical/operational objectives

• **Using technology —** to improve system's performance

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBMGT604A Manage business operations

| Unit Descriptor | The unit covers those activities required of a manager running a business operation and links closely with the business planning units. The emphasis is on the implementation of plans and the monitoring and response to systems failures. |
|---|---|
| | This unit is the implementation of the work done in BSBMGT603A Review and develop business plans; co-assessment should be strongly considered. |
| | Consider co-assessment also with BSBMGT606A Manage customer focus and BSBMGT609A Manage risk. |

| Competency Field | Business Management Services |
|---|---|

## Element

## Performance Criteria

1. Implement tactical and operational plans

  1.1   *Supply chains* of resources to organisation or department established and operating effectively

  1.2   Requirements for skilled labour are met in accordance with plans

  1.3   Activities are brought on line in accordance with scheduling requirements of plans

  1.4   *Preventative and breakdown maintenance arrangements* for business systems are integrated into operations

  1.5   Cost maintenance and control systems are implemented

  1.6   *Performance measurement systems* are tested and operational

  1.7   Projects are commenced consistent with the project management plan

  1.8   Co-ordination of people, resources and equipment provide *optimum results*

  1.9   Products/services meet *quality* and functional specifications

  1.10   Communication/consultation is undertaken according to plans

  1.11   Implementation is consistent with business and strategic plans in place

2. Monitor performance

  2.1   Performance indicators and criteria for assessment are confirmed and in place

  2.2   Indicators/criteria are consistent with organisational objectives and planned outcomes

  2.3   Projects are managed in accordance with established *project management protocols*

| Element | Performance Criteria |
|---|---|
| | 2.4   *Timely* reports on all key aspects of the business are available and user-friendly, and balanced in terms of financial and non financial performance |
| | 2.5   System failures, product failures and variances to plan are reported as they occur |
| 3.   Respond to performance data | 3.1   Relevant performance reports are identified and analysed in detail |
| | 3.2   System specifications and protocols are reviewed to eliminate future failure |
| | 3.3   Groups and individuals contributing to under-performance are *coached*, and training provided where appropriate |
| | 3.4   System processes and work methods are regularly reviewed as part of continual improvement |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| **Supply chains means:** | • a network of facilities that procures raw materials, transforms them into intermediate products (or services) and then finished goods (or services), and delivers them through a distribution system. It spans procurement, production and distribution; views them not as discrete elements but interlinked |
| **Preventative and breakdown maintenance arrangements may include:** | • programmed maintenance |
| | • preventative maintenance plans |
| | • emergency response plans |
| **Performance measurement systems means:** | • those systems designed to collect quantitative and qualitative indicators of performance in all of the Key Result Areas for the organisation so as to identify and remediate variances to plans |
| **Optimum results means:** | • that the best overall mix of results is achieved across the organisation's Key Result Areas. Outcomes are measured within the applicable constraints |

## Range Statement

| | |
|---|---|
| **Quality means:** | • meeting all quality assurance specifications of the organisation |
| **Project management protocols means:** | • the rules of behaviour relating to the development, planning, approval, implementation, management and evaluation of projects |
| **Timely means:** | • in accordance with time limits established in the operational planning process |
| **Coaching refers to:** | • informal on-the-job and off-the-job advice and training to improve performance |

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • The evidence must cover the translation of the plans previously developed, into workable activities or projects |
| | • There must be evidence of a systematic value chain analysis of all of the support activities of the business and the outcomes of that analysis being translated into action |
| | • Evidence of risk management and evaluation of performance leading to effective remediation also needs to be present |
| **OHS considerations may include:** | • review of OHS records and performance management measures |
| | • establishment and maintenance of OHS risk management approaches |
| | • systemic use of hierarchy of control measures |
| | • establishment and maintenance of OHS systems for project management |
| **Underpinning Knowledge\*** <br><br> \*   At this level the learner must demonstrate understanding of specialised knowledge with depth in some areas. | • Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • Strategic planning |
| | • All legislation relevant to the organisation's operation |
| | • Critical path/PERT methodology |
| | • Relevant industrial awards and agreements |

# Evidence Guide

- Electronic commerce systems

- Consultative methods and processes

- Performance measurement and benchmarking methodology

- Operations management

- High reliability organisational concepts

- Energy management

- Capital investment evaluative methodology including NPV and ROI

**Underpinning Skills**

- Analytical and evaluative skills to assess supply chain performance

- Performance measurement skills to develop and manage key performance indicators

- Planning and co-ordination skills to ensure the people resources and equipment work in a functional manner to achieve optimum results

- Communication/consultation skills to ensure all relevant groups and individuals are advised of what is occurring and are provided with an opportunity for input

- Project management skills to ensure project objectives, outcomes and outputs are delivered on time, within budget, and incident free

- Communication and report writing skills to keep all internal customers informed of activities and developments

- Systems analysis and design skills to ensure that system outputs meet tactical/operational objectives and measure performance in a timely way

- Coaching and training skills to remediate any under-performance present in the work group or individuals

- Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

**Resource Implications**

The learner and trainer should have access to appropriate documentation and resources normally used in the workplace

## Evidence Guide

| | |
|---|---|
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:* *These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform    2. Administer    3. Design

- **Collecting, analysing and organising information** — to ensure plans in place meet all quality requirements

- **Communicating ideas and information** — to ensure that all appropriate individuals understand the plans and systems

- **Planning and organising activities** — to review systems and processes to achieve continuous improvement

- **Working with teams and others** — to ensure they are proactive in the management of the operations

- **Using mathematical ideas and techniques** — to analyse system/product failures

- **Solving problems** — to eliminate any negative variances to the plan

- **Using technology** — to improve system processes and work methods where appropriate

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBMGT605A Provide leadership across the organisation

| | |
|---|---|
| **Unit Descriptor** | This unit covers the demonstration of leadership behaviour and *personal and professional competence* necessary to manage at a senior level. It may relate equally to leadership of a small to medium sized organisation or a significant unit of activity in a large organisation. |
| **Competency Field** | Business Management Services |

| Element | Performance Criteria |
|---|---|
| 1. Communicate organisational mission and goals | 1.1 Objectives, values and standards are clarified in accordance with organisation's strategic direction |
| | 1.2 Linkages between organisational objectives, values and standards and the responsibilities of relevant groups and individuals are established |
| | 1.3 Media and language used is appropriate to individuals and group circumstances |
| | 1.4 Expectations of internal groups and individuals are clearly stated and explained in a manner which builds commitment to the organisation |
| | 1.5 Community expectations of the organisation including product safety, OHS, environmental management and any other factors which could potentially impact on the community, are addressed |
| | 1.6 *Incidents* are investigated promptly, and results clearly communicated to relevant groups and individuals |
| 2. Influence groups and individuals | 2.1 Trust, confidence and respect of diverse groups and individuals, are built through positive role modelling and effective communication and consultation |
| | 2.2 Organisational and workplace culture improvements are embraced, resourced and implemented effectively |
| | 2.3 Understanding of the global environment and new technology is demonstrated in work activities |
| | 2.4 Actions convey flexibility, adaptability to change and accessibility |
| | 2.5 Consultation and participation in decision making occurs with relevant groups and individuals where appropriate |
| | 2.6 Decision making takes into account needs and expectations of both internal and external groups |
| | 2.7 Decision making occurs in accordance with *risk management* plans for all options, and within appropriate time frames |

| Element | Performance Criteria |
|---|---|
| | 2.8 Exemplary conduct and performance is demonstrated to build trust and support of both colleagues and those to whom you report |
| | 2.9 Public relations strategy is in place to represent the organisation positively in the media and community |
| 3. Build and support teams | 3.1 *Accountabilities and responsibilities* are assigned to teams consistent with their competencies and operational plans |
| | 3.2 Teams are resourced to allow them to achieve their objectives |
| | 3.3 Teams and individuals are empowered through effective delegations and support for their initiatives |
| | 3.4 *A positive work environment* is created and maintained |
| | 3.5 Teams and individuals are encouraged to develop innovative approaches to the performance of work |
| 4. Demonstrate personal and professional competence | 4.1 Personal qualities and managerial performance are modelled consistent with the performance standards/Code of Conduct of the organisation |
| | 4.2 Self control and self regulation are demonstrated at all times |
| | 4.3 Appropriate interpersonal and leadership styles are adopted to meet particular circumstances and situations |
| | 4.4 Personal objectives and work program outcomes are set and met |
| | 4.5 New knowledge and technology is utilised to continuously improve business processes and product delivery |
| | 4.6 Self performance and *professional competence* is continuously improved through engagement in a range of professional development activities |
| | 4.7 Participation in industry/professional networks and groups occurs regularly |
| | 4.8 Conflict issues and problems are managed through effective negotiations, to achieve optimum business outcomes |
| | 4.9 Problems are handled in a professional and empathetic way |
| | 4.10 Action is preceded by analysis planning and strategic thinking |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br><br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br><br>• relevant industry codes of practice |
| **Personal competence means:** | • the acquisition and demonstration of the range of behaviours necessary to achieve the organisational objectives. They may include:<br><br>  • flexibility<br><br>  • adaptability to change<br><br>  • accessibility<br><br>  • self analysis<br><br>  • decisiveness<br><br>  • personal performance appraisal |
| **Professional competence means:** | • the acquisition and demonstration of the range of knowledge and skills necessary to deliver optimum results for that part of the organisation for which the person is accountable |
| **Incidents may include:** | • product failure<br><br>• emergency response<br><br>• workplace accident<br><br>• environmental event (emissions, noise, etc) |
| **Risk management means:** | • the process of identification of potential negative events and the development of plans to mitigate or minimise the likelihood of the negative event occurring and/or the consequences in the event it does occur |
| **Accountabilities and responsibilities means:** | • clarification of who is to be accountable for a decision or action prior to its execution, and identification of groups, individuals and activities for which a person is responsible for managing |

## Range Statement

| | |
|---|---|
| **Positive work environment means:** | • an environment where employees identify with the organisation and its purpose and where communication is free-flowing, decisions are transparent and conflict is positive and constructive |

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Evidence of effective communication skills and an ability to win commitment to the organisation and its activities must be produced |
| | • The extent to which personal and professional competence is demonstrated, will require input from a wide range of sources providing evidence in respect to a broad range of activities and situations |
| | • The organisation must have a clear definition of the personal competence requirements of their managers |
| **OHS considerations may include:** | • establish and maintain framework for OHS system |
| | • leadership in OHS practice as ethical standards, legislative requirements and good corporate governance |
| | • support for, and use of, participative arrangements |
| **Underpinning Knowledge\*** <br><br> \* At this level the learner must demonstrate understanding of specialised knowledge with depth in some areas. | • Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • Organisation mission, purpose and values |
| | • Organisation objectives, plans and strategies |
| | • Leadership styles |
| | • Strategic planning methodologies |
| | • Data collection methods |
| | • Inventory management systems including material resource planning systems |
| | • Value chain concepts |
| | • External environment scanning relating to social, political, economic and technological developments |
| | • Core competency concepts |
| | • Concept of sustainable competitive advantage |

# Evidence Guide

| | |
|---|---|
| | • Consultative processes and methods |
| | • Organisational change processes |
| | • Organisational design principles |
| | • Legislation, codes and by-laws relevant to the organisation's operations |
| **Underpinning Skills** | • Networking skills to ensure support from key groups and individuals for concepts/ideas/products/services |
| | • Communication/consultation skills to ensure all relevant groups and individuals are advised of what is occurring and are provided with an opportunity for input |
| | • Risk management skills to analyse, identify and develop mitigation strategies for identified risks |
| | • Situational analysis skills to direct, motivate, consult and/or delegate with the leadership behaviour appropriate to the competence and confidence of the team/individual involved and the circumstances of the situation |
| | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:*    *These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform      2. Administer      3. Design

- **Collecting, analysing and organising information —** to ensure that individuals and teams across the organisation are well informed
- **Communicating ideas and information —** to ensure that commitment is gained towards the organisation's objectives/direction
- **Planning and organising activities —** to provide the necessary support to team members
- **Working with teams and others —** to develop innovative approaches to achieving organisational objectives
- **Using mathematical ideas and techniques —** to assist in the calculation of organisation targets, objectives and performance criteria
- **Solving problems —** to achieve business outcomes and assist teams
- **Using technology —** to manage personal time and communicate with relevant groups and individuals

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

## BSBMGT606A Manage customer focus

| Unit Descriptor | This unit covers planning at the tactical level, and the implementation of those plans, to ensure that business expansion and internal and external customer satisfaction levels are in keeping with business plans. |
|---|---|
| | Consider co-assessment with BSBMGT604A Manage business operations |

| Competency Field | Business Management Services |
|---|---|

| Element | Performance Criteria |
|---|---|
| 1. Determine customer requirements | 1.1 Opportunities are provided for customers and staff to provide feedback on existing products/services |
| | 1.2 The market is clearly identified in terms of post, present and potential customers |
| | 1.3 Research is commissioned to capture the needs of the market, including *electronic commerce* solutions |
| | 1.4 The market is provided with all relevant information about products/services supplies |
| | 1.5 *Customer service standards and plans* are developed from research, customer feedback and consultation with relevant individuals |
| | 1.6 Standards and plans clearly state quality, time and delivery specifications, and cost of products/services to be supplied |
| | 1.7 Specifications meet all legal and organisational requirements |
| | 1.8 *Risk management* plans have been implemented in relation to all products/services |
| 2. Manage delivery of products and services to customers | 2.1 *Relevant groups and individuals* have access to customer service standards and plans |
| | 2.2 *Relevant groups and individuals* are competent to deliver products/services to standards required |
| | 2.3 Products/services are delivered to standard required |
| | 2.4 Groups and individuals meet all *customer service standards and plans* |
| | 2.5 Performance improvement plans are developed and implemented where under-performance occurs or opportunity for improvement arises |

| Element | Performance Criteria |
|---|---|
| 3. Monitor and evaluate quality of customer service | 3.1 *Appropriate systems* are developed and technology used to effectively monitor performance against targets and standards |
| | 3.2 Feedback is obtained in regard to *customer satisfaction*, on an on-going basis, and utilised to implement remedial action where necessary |
| | 3.3 Appropriate groups and individuals are consulted to identify activities to be undertaken to improve customer service |
| | 3.4 Continuous improvement strategies are built into future business plans of relevant groups and individuals |
| | 3.5 Reports are prepared and circulated to relevant groups and individuals for follow-up |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br><br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br><br>• relevant industry codes of practice |
| **Electronic commerce refers to:** | • business-to-business, business-to-consumer, government-to-business activities conducted via electronic communication methodologies and networks |
| **Customer service standards and plans may include:** | • response times/delivery times<br>• protocols<br>• quality specifications |
| **Risk management means:** | • the process of identification of potential negative events and the development of plans to mitigate or minimise the likelihood of the negative event occurring and/or the consequences in the event it does occur |

## Range Statement

| | |
|---|---|
| **Relevant groups and individuals means:** | • those persons who have a responsibility for the delivery of products/services to both external/internal customers |
| **Appropriate systems may include:** | • quality management<br>• customer feedback/response |
| **Customer satisfaction means:** | • the extent to which the product or service delivered matches the customer's expectations in regard to price, quality and value to them |

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • All managers have customers (either internal or external) and assessment should cover the whole customer service/quality assurance process<br>• Managers should be actively involved in the development of customer service standards (clearly linked to the customer requirements) and clear evidence needs to be available of their effective oversight of the delivery of products and services to predetermined specifications and customer expectations |
| **OHS considerations may include:** | • review of standards, plans and specifications in terms of OHS legislation (supplier, importer, etc.)<br>• safe delivery of organisation's products/services<br>• systems for supply monitor OHS performance |
| **Underpinning Knowledge***<br><br>* At this level the learner must demonstrate understanding of specialised knowledge with depth in some areas. | • Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• Marketing principles sufficient to communicate with marketing experts as necessary<br>• Electronic commerce applications relevant to the organisation<br>• Legal requirements to operate the organisation<br>• Organisational policies, principles, codes and performance standards |

# Evidence Guide

|  | • Risk management |
|---|---|
|  | • Performance management systems used in the organisation |
|  | • Quality management systems |

| **Underpinning Skills** | • Communication/consultation skills to ensure all relevant groups and individuals are advised of what is occurring and are provided with an opportunity for input |
|---|---|
|  | • Risk management skills to analyse, identify and develop mitigation strategies for identified risks |
|  | • Performance measurement skills to develop and manage key performance indicators |
|  | • Report writing skills to develop and disseminate information on customer service performance |
|  | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |

| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
|---|---|

| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
|---|---|

| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
|---|---|
|  | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
|  | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
|  | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:* *These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information —** to develop customer service standards and plans
- **Communicating ideas and information —** to consult groups and individuals about improvement to customer service
- **Planning and organising activities —** to assess performance
- **Working with teams and others —** to identify customer needs
- **Using mathematical ideas and techniques —** to develop service standards, response times and measurement systems
- **Solving problems —** to remove customer concerns
- **Using technology —** to monitor performance against targets

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBMGT608A Manage innovation and continuous improvement

| | |
|---|---|
| **Unit Descriptor** | This unit covers sustaining an environment in which continuous improvement and learning are promoted and rewarded, including the application of relevant technology. |
| **Competency Field** | Business Management Services |

| Element | Performance Criteria |
|---|---|
| 1. Review programs, systems and processes | 1.1 *Strategies* are established to monitor and evaluate performance of key systems and processes |
| | 1.2 Detailed analyses of *supply chains*, operational and product/service delivery systems are undertaken |
| | 1.3 Performance measures, assessment tools and techniques are identified, analysed and acted upon |
| | 1.4 *Performance reports* and variance from plans are analysed for all key result areas of the organisation |
| | 1.5 Changing trends and opportunities relevant to the organisation are identified and analysed |
| | 1.6 Advice is sought from *specialists,* where appropriate, to identify technology and electronic commerce opportunities |
| 2. Develop options for continuous improvement | 2.1 Groups are briefed on performance improvement strategies and innovation as an essential element of competition |
| | 2.2 *Creative climate* and *organisational learning* is fostered through the promotion of interaction within and between work groups |
| | 2.3 New ideas and entrepreneurial behaviour are encouraged, tried and recognised where successful |
| | 2.4 *Failure* of an idea is accepted as a reasonable price during trialling; success is recognised and celebrated, and embedded into systems |
| | 2.5 *Risk management* and *cost benefit analyses* are undertaken for each option/idea approved for trial |
| | 2.6 *Innovations* are approved through agreed organisational processes |
| 3. Implement innovative processes | 3.1 *Continuous improvement* is promoted as an essential part of doing business |
| | 3.2 Impact of change and consequences for people are addressed and *transition plans* implemented |

| Element | Performance Criteria |
|---|---|
| | 3.3 Objectives, timeframes, measures and communication plans are in place to manage implementation |
| | 3.4 *Contingency plans* are implemented in the event of non-performance |
| | 3.5 *Failure* is followed by prompt investigation and analysis of causes |
| | 3.6 *Emerging challenges and opportunities* are managed effectively |
| | 3.7 *Continuous improvement* systems and processes are regularly evaluated |
| | 3.8 Costs and benefits of innovations and improvements are communicated to all relevant groups and individuals |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| **Strategies means:** | • long term plans which will guide the organisation in achieving its mission |
| **Supply chain refers to:** | • a network of facilities that procures raw materials, transforms them into intermediate products (or services) and then finished goods (or services), and delivers them through a distribution system. It spans procurement, production and distribution; views them not as discrete elements but interlinked |

## Range Statement

| **Performance reports may include:** | • financial |
| --- | --- |
| | • budget/cost variance |
| | • OHS |
| | • environmental |
| | • quality |
| | • customer service |
| | • other operating parameters |
| **Specialists refers to:** | • those people inside and outside the organisation who are expert in the application of technology to process systems and procedures, relevant to the organisation's business |
| **Creative climate means:** | • a climate of high motivation, extensive expertise, deliberative and lateral thinking time to think through and test out ideas |
| **Organisation learning refers to:** | • the extent to which groups and individuals within an organisation are given the opportunity to learn from each other and encouraged to share their learning |
| **Failure means:** | • partial or total failure of an innovation or idea to meet the pre-determined objectives/outcomes |
| **Risk management means:** | • the process of identification of potential negative events and the development of plans to mitigate or minimise the likelihood of the negative event occurring and/or the consequences in the event it does occur |
| **Cost benefit analyses means:** | • a calculation to determine whether the results/outcomes of a particular course of action are sufficient to justify the costs and risks in taking that action |
| **Innovations means:** | • to bring in something new to the organisation. It may be an adaptation or change to a process, product, service, procedure or system, as well as something completely new |
| **Continuous improvement means:** | • consistently reviewing what we do in search of a better way and improving the organisation in every aspect of its activities |

## Range Statement

| | |
|---|---|
| **Resources may include:** | • physical |
| | • financial |
| | • human |
| **Transition plan means:** | • a process of communication and education to help people through major change programs which impact on the way they do their work or them personally |
| **Contingency plan means:** | • a plan which will deal with the uncertainty of a proposal and will come into operation in the event of a failure or non-conformance |
| **Emerging challenges and opportunities means:** | • events/incidents relating to the innovation being implemented which could lead to a less effective implementation (challenge) or greater benefits to the organisation than previously thought (opportunity) |

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range Statement.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Whilst evidence of success in bringing an idea into the organisation and developing an innovation is always the objective of these activities, evidence of idea creation, innovation, testing and evaluation is more critical. The innovations do not have to work for successful promotion to be evidenced |
| | • Evidence of both formal and informal consultation and participation in the search for continuous improvement is essential for this unit |
| **OHS considerations may include:** | • evaluation of organisation's OHS system and related policies, procedures and programs |
| | • implementation of OHS management system with continuous improvement features |
| **Underpinning Knowledge\*** <br><br> \*  At this level the learner must demonstrate understanding of specialised knowledge with depth in some areas. | • Relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • Strategic planning |
| | • Supply chain management |
| | • Performance measurement |
| | • Quality management |
| | • Electronic commercial applications |

# Evidence Guide

|  |  |
|---|---|
|  | • Creativity/innovation theories/concepts |
|  | • Risk management |
|  | • Contingency plans |
|  | • Continuous improvement |
| **Underpinning Skills** | • Quantitative methods including queuing transport, ATM and linear programming techniques |
|  | • Analytical skills to identify improvement opportunities in relation to the services/products you deliver internally or concepts/ideas in your area of expertise |
|  | • Evaluative skills to maintain performance and assess the use of alternative suppliers/contractors |
|  | • Performance measurement skills to develop and manage key performance indicators |
|  | • Risk management skills to analyse, identify and develop mitigation strategies for identified risks |
|  | • Cost and benefit analysis skills to produce balanced arguments to support financial proposals |
|  | • Contingency planning skills to ensure that the risk of failure is minimised and/or in the event of failure, the consequences are minimal |
|  | • Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement |
|  | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
|  | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |

## Evidence Guide

- Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit

| **Key Competency Levels** | | | | | | |
|---|---|---|---|---|---|---|
| NB: *These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.* | | | | | | |
| **Collect, analyse and organise information** | **Communicate ideas and information** | **Plan and organise activities** | **Work with others and in teams** | **Use mathematical ideas and techniques** | **Solve problems** | **Use technology** |
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information —** to undertake performance/variance analysis
- **Communicating ideas and information —** to brief groups on performance improvement strategies
- **Planning and organising activities —** to promote learning and interaction between work groups
- **Working with teams and others —** to undertake risk management and cost benefit analysis
- **Using mathematical ideas and techniques —** to apply statistical and quantitative analysis
- **Solving problems —** to ensure successful implementation of the innovation
- **Using technology —** to enhance the innovation

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

# BSBOHS607A Advise on application of safe design principles to control OHS risk

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the knowledge and skills required of the OHS practitioner to advise on applying safe design principles to control OHS risk during a product's life cycle. |
| **Competency Field** | Business management services |
| **Domain** | Occupational health and safety |
| **Application of the Competency** | The central feature of safe design is the application of relevant information and data about human capabilities and behaviour to the design of objects, facilities, procedures and environments that people use. |
| | Units BSBOHS504A Apply principles of OHS risk management, and BSBOHS505A Manage hazards in the work environment, provide useful underpinning knowledge and skills for this unit. Knowledge of systematic approaches to managing OHS also underpins this unit. |

## Element

Elements define the critical outcomes of a unit of competency.

**1. Advise on the OHS requirements of the design process**

## Performance Criteria

The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement.

1.1 Organisation *decision makers* are made aware of their responsibility for the safety of downstream users and beneficiaries

1.2 Decision makers are advised of their obligation under law to *design* and supply a safe designed product by eliminating OHS *hazards* and controlling for *residual OHS risk*

1.3 OHS is promoted within the design requirements and includes an overall risk evaluation of the designed product's life cycle

1.4 The most current knowledge of OHS principles, materials, technology and systems is sourced and made available for application in the design of the product

1.5 Required education and training to enable decision makers to have the necessary skills and knowledge to identify and eliminate OHS hazards, and to control OHS risk in the design phase, is identified and made available

1.6 Relevant *sources of information and data* are identified and accessed, in particular equipment users

| | 1.7 | Potential users of the equipment are consulted during the design phase |
| | 1.8 | Situations are identified where *specialist advisors* may be required |
| **2. Develop a systematic hazard identification and OHS risk evaluation system for safe design** | 2.1 | OHS hazards are identified and associated *risks* are *analysed* across the *life cycle* of the designed product |
| | 2.2 | A systematic analysis of the *likelihood* and *consequences* of injury or illness arising from exposure to identified OHS hazards guides the selection and implementation of the most appropriate OHS risk controls for the designed product |
| | 2.3 | Hazard identification and risk analysis includes potential alterations to the designed product during its life |
| | 2.4 | Decision making during the *OHS risk evaluation* process is *documented* and made accessible to all parties |
| | 2.5 | A residual *risk register* is established, recording OHS hazards not eliminated in the design together with possible control strategies, and distributed to those involved in the downstream or subsequent life cycle stages |
| | 2.6 | The design is monitored as it evolves to identify potential new OHS hazards and to manage risks if they become evident |
| **3. Advise on principles of OHS risk control** | 3.1 | Design to minimise risk is based on the *hierarchy of control* |
| | 3.2 | The designed product includes *fail-to-safe action* to minimise the impact of possible failure or defect |
| **4. Advise on consultation processes between people involved in the life cycle of the designed product** | 4.1 | Decision makers are advised to consider the range of people who will use or interact with the designed product |
| | 4.2 | Consultation between all *parties* is arranged during the concept and detailed design phases to identify and eliminate OHS hazards and minimise risk |
| | 4.3 | Residual OHS risk in the designed product is communicated appropriately to those who will use or interact with the designed product throughout its life cycle |

| 5. **Advise on contractual arrangements and procurement systems to minimise 'purchased' OHS risk** | 5.1 | Decision makers involved in *purchasing and contractual arrangements* are advised to include a requirement to eliminate OHS hazards, minimise OHS risks, and provide information and data on residual OHS risk |
| | 5.2 | The *design brief or draft specifications* include an agreement to carry out a *Safe Design* approach |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects, which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| ***Decision makers* may include:** | • any party with influence over the specifications of the designed product including but not limited to the designer, client or commissioning agent, financier, manufacturer, supplier, purchaser, installer, user, insurer, importer, erector, maintainer and regulator, and employees of these agents |
| ***Design*:** | • is the process of bringing together innovation, aesthetics and functionality to plan and create a product, process or system to meet the artistic, industrial or performance requirement of an individual or group; and |
| | • involves a series of activities where an idea is conceived, shaped, developed, produced and then acted upon to produce a designed product; and |
| | • includes any subsequent alteration of a designed product such as redesign or retrofit |
| ***A hazard* is:** | • a source or situation with a potential for harm in terms of human injury or ill health, damage to property or the environment, or a combination of these |
| ***Residual OHS risk* is:** | • risk that is unable to be designed out of the product |
| ***Sources of information and data* may include:** | • international and Australian standards, codes of practice and guidance material |
| | • industry advisory bodies |
| | • government and other advisory bodies such as CSIRO, National Health and Medical Research Council, National Occupational Health and Safety Commission (NOHSC), Australian Consumers Association |
| | • Commonwealth, state and territory OHS and other regulatory bodies |
| | • research literature |

|  | • | NOHSC National Standard for Manual Handling, code of practice and associated guidance material |
|---|---|---|
|  | • | Australian and international anthropometric databases |
|  | • | professional associations such as Ergonomics Society of Australia, Institute of Engineers Australia, Safety Institute of Australia |
|  | • | employer groups and unions |
| *Specialist advisors* **may include:** | • | engineers (such as design, acoustic, safety, mechanical, chemical, civil) |
|  | • | architects, interior designers and builders |
|  | • | design professionals |
|  | • | drafts people, quantity surveyors and surveyors |
|  | • | building surveyors and certifiers |
|  | • | occupational hygienists |
|  | • | specialist ergonomists |
|  | • | health professionals |
|  | • | legal practitioners |
|  | • | insurers |
|  | • | technical professionals |
|  | • | maintenance and trades personnel |
|  | • | manufacturers |
|  | • | suppliers and distributors |
|  | • | workplace trainers and assessors |
| *Risk* **is:** | • | the chance of something happening that will result in injury or damage |
|  | • | measured in terms of consequences (injury or damage) and likelihood of the consequence |
| *Risk analysis* **involves:** | • | defining the range of consequences |
|  | • | assessing the effectiveness of existing controls |
|  | • | deciding the likelihood of each consequence |
|  | • | combining these is some way to obtain a level of risk |

| | |
|---|---|
| ***Life cycle of the product* includes:** | • design, construction/manufacture, supply/installation, use, maintenance/servicing, decommissioning/dismantling and disposal |
| | • life cycle cost considerations may also include environmental clean up and redesign/retrofit |
| ***Likelihood* refers to:** | • the probability of an event occurring |
| ***Consequence* refers to:** | • the injury or damage outcome of an event which may be expressed quantitatively or qualitatively; it should include an estimate of cost of injury or ill health |
| ***OHS risk evaluation* involves:** | • comparison of risk with pre-established criteria for tolerance (or as low as reasonably achievable) and the subsequent ranking of risks requiring control |
| ***Documentation of risk evaluation* should include:** | • methods used |
| | • groups involved/consulted |
| | • description of consequences and their likelihood |
| | • information and data used in estimates |
| | • assumptions |
| | • effectiveness of existing controls |
| | • uncertainty in analysis |
| | • factors affecting level of risk |
| | • further information and data, and investigation required |
| A ***risk register* is:** | • a list of the risks including:<br>- scenarios or circumstances under which damage or injury may occur<br>- possible consequences or outcomes in terms of injury or damage<br>- an indication of the likelihood of the consequence(s) occurring |
| ***Hierarchy of control* means developing risk controls within the following priority order:** | • eliminate the hazard, and where this is not practicable, minimise risk by:<br>- substitution<br>- isolating the hazard from personnel<br>- using engineering controls<br>- using administrative controls (eg procedures, training)<br>- using personal protective equipment (PPE) |

| | |
|---|---|
| ***Fail-to-safe action* ensures:** | • that if there is a failure or defect in the product or another factor such as loss of power, then the product is left in a safe condition |
| ***Parties for consultation* may include:** | • user<br>• manufacturer<br>• designer<br>• builder<br>• importer<br>• supplier and/or distributor<br>• installer<br>• maintenance agencies<br>• contractors<br>• commissioning agent<br>• disposer |
| ***Purchasing and contractual arrangements* may include:** | • specifications<br>• statement of work<br>• supplier pre-qualification<br>• tender documentation<br>• purchase order |
| ***Design brief or draft specifications* may include:** | • form or outline of document for design brief<br>• instructions<br>• technical requirements or specifications for a designed product, structure, item, systems or process |
| ***Safe Design* is:** | • a design process that eliminates hazards or minimises potential risk to health and safety by involving decision makers, and considers OHS risks throughout the life cycle of the designed product<br>• a Safe Design approach will generate a design option that eliminates OHS hazards or minimises the risks to those that make the product and those that use it |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this standard must be able to provide evidence of application of OHS risk controls within a collaborative safe design process, either in an actual workplace, simulation exercise or scenario.

Evidence gathered for demonstration of competence will involve products developed for effective application of knowledge and skill in applying OHS risk controls in a safe design process; evidence of how these products were developed; and evidence of use of the products.

## Specific Evidence Requirements

## Required knowledge and understanding and required skills and attributes

These are detailed in the Advanced Diploma in Occupational Health and Safety knowledge and skills matrix.

| Key competencies or generic skills relevant to this unit | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
|---|---|
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks. |
| | The bulleted points provide examples of how the key competencies can be applied for this unit. |
| Communicating ideas and information (3) | • communicating with decision makers, the design team, organisation personnel, specialists and managers |
| | • communicating with stakeholders including OHS representatives and OHS committees, managers and also OHS specialists |
| | • making verbal presentations as part of the briefing/education process of the design team |
| | • preparing and presenting effective reports |
| Collecting, analysing and organising information (3) | • gathering and analysing information and data from different sources about use of products to identify hazards, evaluate risk and design practicable OHS risk controls |
| | • developing and using effective risk management techniques |

| | |
|---|---|
| Planning and organising activities (3) | • researching safe design systems, workplace procedures and other relevant interactions |
| | • undertaking consultation and communication processes as required |
| | • planning own activities |
| Working in a team (3) | • working with all levels of organisational personnel and specialist advisors involved in risk management procedures for safe design |
| Using mathematical ideas and techniques (3) | • interpreting information and data |
| | • using quantitative analysis to determine likelihood and consequences of OHS risk in designed products |
| Solving problems (3) | • developing risk control strategies |
| | • identifying and applying innovation and improvements to ensure safe and practical designed products |
| | • applying learning about safe design to develop improved safe design management practices |
| Using technology (3) | • using technology to extract, analyse and report on required information and data for systematic OHS risk evaluation of designed products |
| | • using software systems for recording and reporting documentation involved in the life cycle of designed product |
| Innovation skills (3) | • identifying improvements to safe design processes |
| | • applying learning about safe design principles to develop systems for improvements in the life cycle of designed product |
| **Products that could be used as evidence include:** | • documents, reports, policies, procedures |
| | • risk register |
| | • emails, letters and other records of processes undertaken to apply safe design principles |
| | • policies, plans and procedures |
| **Processes that could be used as evidence include:** | • how knowledge, skills and techniques of safe design principles were applied in the organisation |
| | • reports of other parties, specialist advisors and agencies contacted as part of safe design processes |

|  |  |
|---|---|
|  | • workshops, meetings, training sessions and debriefing activities |
|  | • consultation activities |
| **Resource implications for assessment include:** | • access to design workgroup or process |
|  | • reports from other parties consulted in developing appropriate interactions between people involved in the life cycle of the designed product |
|  | • access to relevant legislation, standards and guidelines, research or industry data |
|  | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • examples of sufficient depth and scope to address the range of the competency. This may be achieved by one project where the learner is involved in the complete design process; however, there may be a need for a number of examples to address the full range of competency |
|  | • that, where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • that assessment may be through a simulated project based activity or actual involvement with a specific safe design management practice |
| **Integrated competency assessment means:** | • that this unit can be assessed alone or as part of an integrated assessment activity involving other relevant OHS related units: |
|  |    - this unit may be assessed as part of assessment of units BSBOHS603A Analyse and evaluate OHS risk, and/or BSBOHS604A Apply ergonomic principles to control OHS risk |

# BSBPM405A Apply human resources management approaches

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to assist with aspects of human resources management of a project. This involves calculating human resource requirements and skills levels for achievement of project tasks, identifying the learning and development needs of people working on the project, facilitating these needs being met, and resolving and preventing conflict within the team. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project team member usually performs this function under the overall direction of the project manager and working with other project team members. The functions performed by a project team manager to manage human resources for the whole project are addressed in BSBPM506A Manage project human resources. |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Assist with determination of human resource requirements** | 1.1 *Work break-down structure* is analysed to determine *human resource requirements* |
| | 1.2 Assessment is made of skill levels of project personnel against project task requirements |
| | 1.3 Contribution is made to stakeholder analysis, and stakeholder expectations are quantified and qualified |
| | 1.4 Responsibilities are assigned for achieving project deliverables |
| **2. Assist with human resource control and stakeholder management** | 2.1 The work of project personnel is monitored against assigned roles and responsibilities |
| | 2.2 Actual effort is tracked, monitored and controlled against plan, and skill levels are reviewed against allocated tasks, and remedial action is recommended, where required, to *others* |
| | 2.3 Contribution is made to tracking, monitoring and controlling stakeholder participation in and communication with the project |

2.4      Others are advised when assigned responsibilities are not met by project personnel, or stakeholder expectations are at variance

2.5      Work is undertaken in a multi-disciplinary environment in accordance with established human resource management *practices, plans, guidelines and procedures* to achieve designated project objectives

2.6      Potential and actual conflicts are resolved in accordance with agreed dispute resolution processes or are reported to others for resolution

2.7      *Human resource development opportunities* are offered to individuals with skill gaps

**3. Contribute to conclusion of human resource practices and stakeholder management**

3.1      Contribution is made to assess the overall effectiveness of project human resource management, and lessons learned are documented

3.2      Human resource issues are reported to others to aid the continuous improvement process

3.3      Contribution is made to stakeholder satisfaction analysis, and in post-project operational review

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| Legislation, codes and national standards relevant to the workplace which may include: | <ul><li>award and enterprise agreements and relevant industrial instruments</li><li>relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination</li><li>relevant industry codes of practice</li></ul> |
|---|---|
| ***Work break-down structure* is:** | <ul><li>a planning tool or process which divides and sub-divides the work of a project into smaller, more manageable work packages</li></ul> |
| ***Human resource requirements* may include occupations such as:** | <ul><li>engineer, inspector, systems analyst, researcher, labourer, industrial chemist, accountant, editor, writer, statistician etc</li></ul> |

| | |
|---|---|
| *Others* **may include:** | • project manager |
| | • higher project authority |
| | • team members |
| | • project specialists or other personnel |
| *Practices, plans guidelines and procedures* **may include:** | • project human resources management plan |
| | • organisation project management procedures |
| | • skills framework nominating skill levels required for specific types of project activities |
| | • staffing plan/job description |
| | • industrial relations agreements and guidelines |
| | • professional operating standards |
| *Human resource development opportunities* **may include:** | • project management |
| | • general management |
| | • project administration, for example computer applications and filing systems |
| | • specialist/professional skills and career progression |
| | • interpersonal communications |
| | • team building and group activities |
| | • coaching and mentoring |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that hey have contributed to the human resources management of projects. This will include evidence of working with others to facilitate achievement of project outcomes; practising resource management, including stakeholder management; preventing and resolving conflict; and supporting and developing skills in the project team.

### Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • the need for human resources management within the broad project management framework |
| | • the place of project human resources management in the context of the project life cycle and other project management functions |
| | • the application of project human resources management tools and techniques within the candidate's area of expertise |
| | • how, when and why project human resources management processes are implemented |

| | |
|---|---|
| **Required skills and attributes include:** | • the importance of the individual's contribution to the project human resources management process |
| | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities |
| | • human resource management skills |
| | • planning |
| | • monitoring and tracking |
| | • teamwork and communication skills |
| | • attributes: |
| |    - empathy |
| |    - attention to detail |
| |    - ability to work with others |
| |    - belief in the value of learning and development |

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
| | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (2) | • communicating as part of a team, including negotiating and developing reports |
| | • communicating verbally, including making presentations, if required, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking and monitoring human resources within the project |
| | • applying relevant skills associated with reviewing project human resources management |
| Planning and organising activities (2) | • planning work and project tasks for self and with others |
| Working in a team (2) | • working with others, including external parties/clients and project team manager |
| Using mathematical ideas and techniques (1) | • calculating associated with data manipulation involved in project |

| Solving problems (2) | • | applying problem-solving skills where required to address problems arising in managing people within projects, and the broader implications of (sometimes conflicting) stakeholder expectations |
|---|---|---|
| Using technology (2) | • | using word processing packages to produce written correspondence and reports of project activities |
| | • | using specific project management, resource and HR management software tools |
| | • | using assistive technology, if required |
| Innovation skills (—) | • | not applicable |

**Products that could be used as evidence include:**

resource management (identification, allocation, tracking) records

- responsibility assignment and resource assignment registers/tables
- lists of individual and group competencies
- input to the project human resources management plan
- records of contribution to team activities, including team training and development
- conflict resolution records

**Processes that could be used as evidence include:**

- how resources were allocated and tracked for suitability of numbers/effort and skill levels
- how project responsibilities were assigned and tracked for accountability/conformance
- how conflict between team members was resolved and actions taken to prevent conflicts eventuating
- how human resource management issues were acted upon including reporting up to a higher authority

**Resource implications for assessment include:**

- access to workplace documentation

**Validity and sufficiency of evidence requires:**

- that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment
- examples of projects where the candidate has contributed to managing human resources for projects

**Integrated competency assessment means:**

- that this unit should be assessed with other project management units at Certificate IV, as applicable to candidate's role in the project

# BSBPM408A Apply contract and procurement techniques

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to assist with contracting and procurement for a project. It covers identifying procurement and contract requirements, contributing to contractor selection, conducting contracting and procurement activities, and conducting finalisation activities for the project. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project team member usually performs this function under the overall direction of the project manager and working with other project team members. The functions performed by a project team manager to manage procurement within projects are addressed in BSBPM509A Manage project procurement. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Assist with contract and procurement planning** | 1.1   Contribution is made to the establishment of procurement requirements |
| | 1.2   Under *delegated authority*, contribution is made to the development of the procurement management plan |
| | 1.3   Contribution is made to the development of project documentation for contract definition and formation |
| **2. Contribute to contractor selection process** | 2.1   Information on potential suppliers is gathered and evaluated |
| | 2.2   Recommendations are made to assist in selection of preferred contractors |
| | 2.3   Contribution is provided to the definition of agreed terms and conditions with preferred contractor |
| | 2.4   Contribution is made to the development of the final tendering and contractual documentation |
| **3. Conduct contracting and procurement activities** | 3.1   *Procurement activities* are undertaken and information is maintained so that reporting, confidentiality and audit requirements are met |
| | 3.2   Supplies are received, reconciled and registered in accordance with established procedures to facilitate payment throughout project |

| | 3.3 | Contractors and suppliers and their activities are monitored and controlled for compliance with designated responsibilities, deliverables, time/cost and quality conformance, and other requirements |
|---|---|---|
| **4. Conduct finalisation activities** | 4.1 | Testing and acceptance of supplies are undertaken to ensure quality and suitability for purpose |
| | 4.2 | Assistance is provided in the ongoing *review* of project outcomes using available *records* and information to determine the effectiveness of contracting and procurement activities |
| | 4.3 | Contracting and procurement management issues and responses are reported to *others* for application in future projects |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| Legislation, codes and national standards relevant to the workplace which may include**:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| *Delegated authority* **means:** | • within established organisational framework, procedures and routines<br>• under limited guidance and supervision<br>• within agreed authorisation and limits<br>• subject to frequent change in a multi-disciplinary environment |
| *Procurement activities* **may include:** | • obtaining quotes from potential suppliers or providing quotes to potential clients or collaborating agencies and alliances<br>• identifying OHS issues<br>• confirming details<br>• obtaining approvals from higher project authorities<br>• formally receipting goods and services or providing formal notice of delivery of goods and services<br>• planning, specifying and/or conducting test and acceptance procedures<br>• maintaining registers and lists |

|                                           |                                                                              |
| ----------------------------------------- | ---------------------------------------------------------------------------- |
|                                           | • processing payment documentation                                           |
|                                           | • liaising with client, contractors and sub-contractors, and other stakeholders |
|                                           | • conducting transfer and disposal actions                                   |
| *Review* **may include evaluations of:**  | • agreed major milestones, for example phases and sub-contracts              |
|                                           | • delivery of major deliverables                                             |
|                                           | • changes of key personnel                                                   |
|                                           | • finalisation of project and other agreed milestones                        |
| *Records* **may include:**                | • lists of suppliers                                                         |
|                                           | • procurement logs, registers                                                |
|                                           | • quotes, invoices and receipts                                              |
|                                           | • test and acceptance results                                                |
|                                           | • assets and disposal actions                                                |
|                                           | • procurement reports                                                        |
|                                           | • records of contract planning, formation, negotiation or administration    |
| *Others* **may include:**                 | • project manager                                                            |
|                                           | • higher project authorities                                                 |
|                                           | • team members                                                               |
|                                           | • project specialists or personnel                                          |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have contributed to the management of contracting and procurement within projects. This will include evidence of working with others to plan and manage contracts/procurement; developing documentation used in compiling contracts, negotiation or administration of contracts; selecting contractors through organisational procedures; and reviewing contract/procurement management within the project.

### Specific Evidence Requirements

| **Required knowledge and understanding include:** | • the need for project contract and procurement management within the broad project management framework |
| ------------------------------------------------- | -------------------------------------------------------------------------------------------------------- |

|  |  |
|---|---|
| **Required skills and attributes include:** | • OHS legislative requirements<br><br>• the place of project contract and procurement management in the context of the project life cycle and other project management functions<br><br>• the application of project contract and procurement management tools and techniques within the candidate's area of expertise<br><br>• how, when and why project contract and procurement management processes are implemented<br><br>• the importance of the individual's contribution in the project contract and procurement management process<br><br>• ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities<br><br>• procurement management<br><br>• contract definition, formation and administration management<br><br>• planning<br><br>• monitoring and tracking<br><br>• teamwork and communication skills<br><br>• attributes:<br>  - accuracy<br>  - attention to detail<br>  - thoroughness |
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:<br><br>Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks<br><br>The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (2) | • communicating as part of a team, including negotiating and developing reports<br><br>• communicating verbally, including making presentations, if required, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking, monitoring and controlling contract and procurement activity within project |

|  | • | applying relevant skills associated with reviewing projects |
|---|---|---|
| Planning and organising activities (2) | • | planning work and project tasks for self and with others |
| Working in a team (2) | • | working with others, including external parties/clients and project team manager |
| Using mathematical ideas and techniques (1) | • | using calculation skills associated with data manipulation involved in project and financial management of procurement |
| Solving problems (2) | • | applying problem-solving skills where required to address problems arising in managing procurement and contract activity within projects |
| Using technology (2) | • | using word processing packages and spreadsheets to produce written correspondence, reports of project activities and procurement reports |
|  | • | using specific project management software tools |
|  | • | using assistive technology, if required |
| Innovation skills (—) | • | not applicable |
| **Products that could be used as evidence include:** | • | input to contract and procurement management plans |
|  | • | records of potential suppliers |
|  | • | records of input to the contractor evaluation and selection process |
|  | • | procurement logs, registers and other records of quotes, invoices, receipts, test and acceptance results, assets and disposal actions |
|  | • | procurement reports |
|  | • | records of input to contract and procurement reviews, including reports of lessons learned and recommendations for improvement |
| **Processes that could be used as evidence include:** | • | how procurement requirements were determined |
|  | • | how procurement management plan was developed |
|  | • | how contractor selection process was implemented |
|  | • | how necessary procurement was managed |
|  | • | how contract and procurement activity was reviewed |
| **Resource implications for assessment include:** | • | access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • | that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |

|  | • examples of projects where the candidate has contributed to managing procurement and contracts for projects |
|---|---|
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at Certificate IV, as applicable to the candidate's role in the project |

# BSBPM501A Manage application of project integrative processes

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to integrate and balance the overall project management functions of scope, time, cost, quality, human resources, communications, risk and procurement, and align and track the project objectives to comply with organisational goals, strategies and objectives. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project manager usually performs this function. The functions performed by a program manager to manage integration within multiple projects are addressed in BSBPM601A Direct the integration of multiple projects/programs |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Manage integration of all functions of project management** | 1.1 Project stakeholders and their interests are identified with guidance of senior personnel |
| | 1.2 All *project management functions* are analysed with senior personnel and relevant stakeholders to determine achievable project objectives |
| | 1.3 The *project plan* is developed, to integrate all project management functions to achieve outcomes and requirements for time, cost, quality, risk/uncertainty |
| | 1.4 Project plan is endorsed by senior personnel |
| | 1.5 Designated control mechanisms are established to control planned activity |
| **2. Coordinate internal and external environments** | 2.1 The project is managed within an established *internal working environment* to ensure work is conducted effectively throughout the project |
| | 2.2 Established links are maintained to align project objectives with organisation objectives throughout the project life cycle |
| | 2.3 Where necessary, assistance from senior personnel is sought to resolve conflicts which may negatively affect project objectives |
| **3. Implement project activities throughout life cycle** | 3.1 Agreed project phases, approval points and review points occur |

3.2 Progress is reported against established project baselines to measure performance throughout the project life cycle

3.3 Established *finalisation plans, procedures and activities* are implemented

3.4 *Integration management issues and recommended improvements* are identified, documented and passed on to senior personnel for application to future projects

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| **The nine *project management functions* are:** | • project integration<br>• scope<br>• time<br>• cost<br>• quality<br>• human resources<br>• communications<br>• risk<br>• procurement and contracting |
| **The *project plan* may include:** | • a single document<br>• a covering document which integrates the requirements of the nine functions of project management using appropriate formats and procedures |
| **The *internal environment* may include:** | • physical location of project<br>• layout of project personnel and equipment<br>• personal working conditions<br>• team dynamics<br>• identity and differentiation of the project within the larger environment |

| | |
|---|---|
| ***Finalisation plans, procedures and activities* may include:** | • transition of responsibility/ownership of project deliverables/products |
| | • transfer of assets to the client or originating owner |
| | • warranty requirements |
| | • project evaluation |
| | • final audit/reconciliation |
| | • settling of financial liabilities |
| | • finalisation of account codes and other financial documentation |
| | • forwarding finalisation report to senior personnel |
| ***Integration management issues and recommended improvements* may include:** | • evaluation using established success and failure criteria |
| | • lessons learned |
| | • knowledge management |
| | • training programs |
| | • records |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility within projects for integrating all project management functions (scope, time, cost, quality, human resources, communications, risk and procurement). This will include evidence of managing the work of others in the project team.

### Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • a broad knowledge and understanding of: |
| | - the project process, the project life cycle and the relationship between project phases |
| | - planning and control procedures, resource management and risk management |
| | - a range of suitable methodologies, techniques and tools available to project managers |
| | - the application of leadership and personnel management within a project environment |
| | - internal and external environment factors that may affect the project |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities |

- project management

- planning and organising

- communication and negotiation

- problem-solving

- leadership and personnel management

- monitoring

- evaluation

- attributes:
  - analytical
  - able to maintain an overview
  - communicative
  - positive leadership
  - focused on outcomes

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:<br><br>Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks<br><br>The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to lead a team, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking and monitoring of project<br>• applying relevant skills associated with reviewing projects |
| Planning and organising activities (2) | • planning own work and that of project team members |
| Working in a team (3) | • leading and representing the project team<br>• working with others, including external parties/clients and project team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in project including financial data |
| Solving problems (3) | • applying problem-solving skills, as required |

|  | • | assisting others to solve problems arising within the project |
|---|---|---|
| Using technology (2) | • | using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of project activities, financial reporting and data collation |
|  | • | using specific project management software tools |
|  | • | using assistive technology, if required |
| Innovation skills (2) | • | using review processes to inform future activity in project management |

**Products that could be used as evidence include:**

• documentation produces in managing project integration, such as:

- records of evaluation and consultative processes to determine achievable project objectives
- project plans and sub-plans covering the nine functions of project management
- records of evaluation of the impact of the organisation and other environments on project objectives
- records of implementation of project phases and milestones
- records of measurement and reporting of progress in relation to established baselines
- finalisation plans
- lists of integration management issues and recommended improvements

**Processes that could be used as evidence include:**

• how project planning was undertaken

• how team members were managed throughout projects

• how projects were monitored during the life cycle of the project

• how problems arising in projects were addressed

• how projects were finalised

• how projects were reviewed and lessons learned acted upon

**Resource implications for assessment include:**

• access to workplace documentation

**Validity and sufficiency of evidence requires:**

• that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment

|  |  |
|---|---|
|  | • examples of projects where the candidate has managed integration for projects |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at a Diploma qualification, as applicable to the candidate's management role in projects |

# BSBPM502A Manage project scope

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to determine and control the end products of the project, and the processes to develop them. It covers project authorisation, developing a scope management plan, and managing the application of project scope controls. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project manager usually performs this function. The functions performed by a program manager to manage scope within multiple projects are addressed in BSBPM602A Direct the scope of multiple projects/programs. |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Conduct project authorisation activities** | 1.1 *Project authorisation* is confirmed with a higher authority as the basis for future project management activity and commitment of resources and effort |
| **2. Conduct project scope definition activities** | 2.1 Project objectives, *deliverables*, constraints and assumptions and principal work activities are identified with guidance of a higher project authority and agreed between the project team and the client |
| | 2.2 Designated measurable project benefits and outcomes are established to enable quantified evaluation of *project performance* |
| | 2.3 *Scope management* plan is developed and implemented |
| **3. Manage application of scope controls** | 3.1 Agreed scope management procedures and processes are implemented |
| | 3.2 The impact of scope changes is managed within established time, cost and quality constraints according to *change control procedures* and to meet project objectives |
| | 3.3 Progress is reviewed and results recorded to assess the effectiveness of scope management procedures |
| | 3.4 Scope management issues and recommended improvements are identified, documented and passed on to a higher project authority for application to future projects |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| *Project authorisation* **may:** | • already have been decided before involvement of the project manager<br>• be required at a number of critical review points during the project<br>• be in the form of a scope statement which briefly explains why the project has been formed, what it hopes to achieve and how success will be measured |
| *Project deliverables* **may include:** | • all products and services defined within the project scope |
| *Scope management* **may include:** | • refining scope progressively throughout the project life cycle<br>• identifying and reporting scope creep, that is incremental increases to scope that were not part of the original project requirements<br>• identifying factors which influence changes to scope<br>• determining that a scope change has occurred or is about to occur<br>• seeking authorisation for changes to project scope<br>• implementing agreed scope changes<br>• monitoring and reporting the effect of scope changes on other areas and on achievement of project objectives |
| *Change control procedures* **may include:** | • major elements of the project liable to change, for example design, engineering, finance<br>• project documentation, including plans, schedules, statements, directives, guidelines and instructions<br>• formal agreements, for example contracts, sub-contracts, memoranda of understanding |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility for scoping projects. This will include evidence of managing the work of others within the project team to scope the project.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • a broad knowledge and understanding of: <br> - organisational processes leading to project authorisation, start-up and designation of project manager <br> - the place of scope management in the context of the project life cycle <br> - the need for scope definition during project start-up and ongoing definition during the project <br> - methods to define products and activities, for example work, organisation and product breakdown structures <br> - the components of a scope statement <br> - the practice of change control |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities <br> • project management <br> • planning and organising <br> • communication and negotiation <br> • problem-solving <br> • leadership and personnel management <br> • monitoring and review skills <br> • attributes: <br>   - analytical <br>   - able to maintain an overview <br>   - communicative <br>   - positive leadership |

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| --- | --- |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
| | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to lead a team, including negotiating and developing reports<br><br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking, monitoring and controlling the project<br>• applying relevant skills associated with reviewing the project |
| Planning and organising activities (2) | • planning own work and that of project team members |
| Working in a team (3) | • leading and representing the project team<br><br>• working with others, including external parties/clients and project team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in project including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems arising in managing the project<br><br>• assisting others to solve problems arising within project |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence, a plan, scope definition and reports of project activities, financial reporting and data collation<br><br>• using specific project management software tools<br>• using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in project management |

| | |
|---|---|
| **Products that could be used as evidence include:** | • documentation produced in managing scope of projects such as: |
| |    - project scope documentation, including plans, schedules, statements, directives, guidelines and instructions |
| |    - work breakdown, product breakdown and organisation breakdown structures |
| |    - other scope definition documents |
| |    - progress and performance measurement reports |
| |    - change requests/change orders |
| |    - records of control of scope changes |
| |    - records of scope lessons learned |
| **Processes that could be used as evidence include:** | • how project authorisation was gained |
| | • how project scope was defined |
| | • how team members were managed throughout projects with respect to the scope of each project |
| | • how the need for scope changes within projects were identified and implemented |
| | • how projects were reviewed with respect to the scope of the project |
| | • how improvements to scope management of projects were acted upon |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • examples of projects where the candidate has undertaken project scope management responsibilities |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at a Diploma qualification, as applicable to the candidate's management role in projects |

# BSBPM503A Manage project time

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to manage time within projects. It covers determining and implementing the project schedule and assessing time management outcomes. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project manager usually performs this function. The functions performed by a program manager to manage time within multiple projects are addressed in BSBPM603A Direct time management of multiple projects/programs. |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Determine project schedule** | 1.1 The duration and effort, sequence and dependencies of tasks are determined from the scope definition as the basis for the project schedule |
| | 1.2 Input to and approval for the project schedule are obtained from stakeholders and a higher authority |
| | 1.3 Within *delegated authority*, *methods, techniques and tools* are selected and used to determine preferred schedule, *time management plan(s)*, resource allocation and financial requirements |
| | 1.4 Agreement to the schedule is obtained from a higher project authority and communicated to stakeholders to provide the basis for measurement of progress |
| **2. Implement project schedule** | 2.1 Mechanisms are implemented to measure, record and report progress of activities in relation to the agreed schedule and plans |
| | 2.2 Ongoing analysis of options is conducted to identify variances and forecast the impact of changes to the schedule |
| | 2.3 Progress is reviewed throughout the project life cycle and agreed schedule changes are implemented to ensure consistency with changing scope, objectives and constraints related to time and resource availability |

|  | 2.4 | Responses to perceived, potential or actual schedule changes are developed, agreed by a higher project authority, and implemented to maintain project objectives |
|---|---|---|
| **3. Assess time management outcomes** | 3.1 | Project outcomes are reviewed from available *records* and information to determine the effectiveness of time management activities |
|  | 3.2 | Time management issues and recommended improvements are identified, documented and passed on to a higher project authority for application in future projects |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| Legislation, codes and national standards relevant to the workplace which may include**:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
|---|---|
| ***Delegated authority* refers to activities:** | • being done independently within broad guidance or by taking the lead of a team<br>• involving consultation with other project members, teams and internal stakeholders<br>• involving the selection, use and supervision of appropriate time management methods, tools and techniques<br>• being conducted routinely or as changing circumstances dictate<br>• taking into account internal organisational change and external environmental change |
| ***Methods, techniques and tools* may include:** | • using personal experience and/or subject matter experts<br>• conducting or supervising qualitative and/or quantitative time analysis, such as schedule simulation, decision analysis, contingency planning and alternative strategy development<br>• using specialist time analysis tools to assist in the decision making process |

| | |
|---|---|
| ***Time management plans* may include:** | • project schedule and sub-schedules |
| | • lists of milestones |
| | • schedule management strategies and actions, standardised formal arrangements, responsibility assignment, contingency plans and assigned schedule management responsibilities |
| ***Records* may include:** | • lists of variances and forecasts of potential schedule events |
| | • Gantt, PERT and other scheduling charts |
| | • diaries, incident logs, occurrence reports and other such records |
| | • records of analysis, evaluation of options, recommended and approved courses of action |
| | • project and/or organisation files and records |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility within projects for time management of the projects. This will include evidence of managing the work of others within the project team with respect to time management of the project.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • a broad knowledge and understanding of:<br> - the need to link time, cost and resources to the project schedule<br> - responsibilities for time management<br> - development of project schedules<br> - use of the schedule as a control mechanism<br> - the place of time management in the context of the project life cycle and other project management functions<br> - appropriate time management methodologies, their capabilities, limitations, application and outcomes |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities |
| | • project management |
| | • time management |
| | • planning and organising |
| | • communication and negotiation |

- problem-solving
- leadership and personnel management
- monitoring and review skills
- attributes:
  - analytical
  - able to maintain an overview
  - communicative
  - positive leadership

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
| | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to lead a team, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking and monitoring the project<br>• applying relevant skills associated with reviewing the project |
| Planning and organising activities (2) | • planning own work and that of project team members |
| Working in a team (3) | • leading and representing the project team<br>• working with others, including external parties/clients and project team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in project including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems arising in managing the project<br>• assisting others to solve problems arising within project |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of project activities, financial reporting and data collation<br>• using specific project management software tools<br>• using assistive technology, if required |

| Innovation skills (2) | • using review process to inform future activity in project management |
|---|---|
| **Products that could be used as evidence include:** | • documentation produced in managing projects:<br>  - project work breakdown structure<br>  - key activity schedule<br>  - application of precedence and dependency principles to task definition<br>  - project schedule<br>  - regular schedule reports to stakeholders and a higher authority<br>  - application of monitoring, review and reporting mechanisms<br>  - application of actual progress against planned progress<br>  - records of recommendations for, and corrective actions taken against, variances in the project schedule<br>  - records of lessons learned |
| **Processes that could be used as evidence include:** | • how the schedule of projects was determined<br>• how agreement on schedule was reached with relevant parties<br>• how team members were managed throughout projects with respect to time management within the project<br>• how the schedule was managed throughout projects<br>• how problems and issues with time management of projects were identified and addressed<br>• how projects were reviewed with respect to time management of the project<br>• how improvements to time management of projects were acted upon |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment<br>• examples of projects where the candidate has managed time and scheduling within projects |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at a Diploma qualification, as applicable to the candidate's management role in projects |

## BSBPM504A Manage project costs

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to identify, analyse and refine project costs to produce a budget, and use this budget as the principal mechanism to control project cost. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project manager usually performs this function. The functions performed by a program manager to manage costs within multiple projects are addressed in BSBPM604A Direct cost management of multiple projects/programs. |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Determine project costs** | 1.1 Resource requirements for individual tasks are determined, with input from stakeholders and guidance of *others* |
| | 1.2 *Project costs* are estimated to enable budgets to be developed and agreed cost management processes implemented |
| | 1.3 Within *delegated authority,* a cost management plan is developed and implemented to ensure clarity of understanding and ongoing management of project finances |
| **2. Monitor and control project costs** | 2.1 Agreed *financial management processes and procedures* are implemented to monitor actual expenditure and to control costs |
| | 2.2 Cost analysis methods and tools are selected and used to identify cost variations, evaluate options and recommend actions to a higher project authority |
| | 2.3 Agreed actions are implemented, monitored and modified to maintain financial and overall project objectives throughout the project life cycle |
| **3. Conduct financial completion activities** | 3.1 Appropriate activities are conducted to signify financial completion |
| | 3.2 *Review* of project outcomes is undertaken using available *records* and information to determine the effectiveness of cost management processes and procedures |

3.3 Cost management issues and recommended improvements are identified

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| ***Others* may include:** | • program manager<br>• higher project authority<br>• team members<br>• project specialists or other personnel |
| ***Project costs* are estimated to a level of accuracy available considering:** | • the stage of the project life cycle<br>• the availability of information at the time<br>• contingencies to allow for identified risks and uncertainty<br>• organisational requirements, for example overhead and profit margin |
| ***Delegated authority* means that activities will:** | • be done independently within broad guidance or by taking the lead of a team<br>• involve consultation with other project members, teams and internal stakeholders<br>• involve the selection, use and supervision of appropriate time management methods, tools and techniques<br>• be conducted routinely or as changing circumstances dictate<br>• take into account internal organisational change and external environmental change |
| ***Financial management processes and procedures* may include:** | • approval processes<br>• financial authorisations/delegations<br>• invoice procedures<br>• communication and reporting processes |
| ***Review* may include evaluations of:** | • agreed major milestones, for example phases and sub-contracts<br>• delivery of major deliverables<br>• change of key personnel |

| | |
|---|---|
| | •     rganization of project and other agreed milestones |
| ***Records* may include:** | •   lists of potential costs |
| | •   invoice and payment summaries |
| | •   budgets, commitment and expenditure |
| | •   cost management plans |
| | •   reports to a higher authority |
| | •   recommended and approved courses of action |
| | •   project and/or   rganization files and records |
| | •   cost management lessons learned |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility within projects for cost of the projects. This will include evidence of managing the work of others within the project team with respect to cost management of the project.

### Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • broad knowledge and understanding of: |
| | - the need to link time, cost and resources to the project framework |
| | - acceptance of responsibilities for cost management |
| | - development of project budgets and expenditure forecasts |
| | - use of the budgets and expenditure forecasts as control mechanisms |
| | - the place of cost management in the context of the project life cycle and other project management functions |
| | - appropriate cost management methodologies, their capabilities, limitations, application and outcomes |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities |
| | • project management |
| | • financial management |
| | • planning and organising |
| | • communication and negotiation |
| | • problem-solving |
| | • leadership and personnel management |

- monitoring and review skills
- attributes:
  - analytical
  - able to maintain an overview
  - communicative
  - positive leadership

| | |
|---|---|
| **Key competencies or generic skills relevant to this** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
| | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to lead a team, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking, monitoring and controlling financial aspects of the project<br>• reviewing the project |
| Planning and organising activities (2) | • planning own work and that of team members |
| Working in a team (3) | • leading and representing the project team<br>• working with others, including external parties/clients and project team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation, including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems arising in managing the project<br>• assisting others to solve problems within the project |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of project activities, financial reporting and data collation<br>• using specific project management software tools |
| Innovation skills (2) | • using review process to inform future activity |

| | |
|---|---|
| **Products that could be used as evidence include:** | • documentation produced in managing project costs:<br>  - cost estimates<br>  - cost management plans and strategies<br>  - cost breakdown structures<br>  - project budgets and expenditure forecasts<br>  - financial transition plans<br>  - records of project finalisation activities and disposal of project assets<br>  - project finalisation reports<br>  - records of cost management lessons learned |
| **Processes that could be used as evidence include:** | • how resource requirements were determined<br>• how cost management plans were developed<br>• how team members were managed throughout projects with respect to the costs of the project<br>• how problems and issues with respect to costs were identified and addressed<br>• how projects were reviewed with respect to costs<br>• how cost management improvements were actioned |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment<br>• examples of projects where the candidate has managed costs within projects |
| **Integrated competency assessment means:** | • this unit should be assessed with other project management units at a Diploma qualification as applicable to the candidate's management role in projects |

# BSBPM505A Manage project quality

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to manage quality within projects. It covers determining quality requirements, implementing quality assurance processes, and using review and evaluation to make quality improvements in current and future projects. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project manager usually performs this function. The functions performed by a program manager to manage quality within multiple projects are addressed in BSBPM605A Direct quality management of multiple projects/programs. |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Determine quality requirements** | 1.1 *Quality objectives*, standards and levels are determined, with input from stakeholders and guidance of a higher project authority, to establish the basis for quality outcomes and *a quality management plan* |
| | 1.2 Established *quality management methods, techniques and tools* are selected and used to determine preferred mix of quality, capability, cost and time |
| | 1.3 Quality criteria are identified, agreed with a higher project authority and communicated to stakeholders to ensure clarity of understanding and achievement of quality and overall project objectives |
| | 1.4 Agreed quality requirements are included in the project plan and implemented as basis for performance measurement |
| **2. Implement quality assurance** | 2.1 Results of project activities and product performance are measured and documented throughout the project life cycle to determine compliance with agreed quality standards |
| | 2.2 Causes of unsatisfactory results are identified, in consultation with the client, and appropriate actions are recommended to a higher project authority to enable continuous improvement in quality outcomes |

| | 2.3 | Inspections of quality processes and *quality control* results are conducted to determine compliance of quality standards to overall quality objectives |
|---|---|---|
| | 2.4 | A quality management system is maintained to enable effective recording and communication of quality issues and outcomes to a higher project authority and stakeholders |
| **3. Implement project quality improvements** | 3.1 | Processes are reviewed and agreed changes implemented continually throughout the project life cycle to ensure continuous improvement to quality |
| | 3.2 | Project outcomes are reviewed against performance criteria to determine the effectiveness of quality management processes and procedures |
| | 3.3 | Lessons learned and recommended *improvements* are identified, documented and passed on to a higher project authority for application in future projects |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| *Quality objectives* **may include:** | • requirements from the client and other stakeholders<br>• requirements from a higher project authority<br>• negotiated trade-offs between cost, schedule and performance<br>• those quality aspects which may impact on customer satisfaction |
| *A quality management plan* **may include:** | • established processes<br>• authorisations and responsibilities for quality control<br>• quality assurance<br>• continuous improvement |
| *Quality management methods, techniques and tools* **may include:** | • group work activities<br>• brainstorming<br>• benchmarking<br>• charting processes |

|  | • ranking candidates |
|---|---|
|  | • defining control |
|  | • undertaking benefit/cost analysis |
|  | • processes that limit and/or indicate variation |
|  | • control charts |
|  | • flowcharts |
|  | • histograms |
|  | • pareto charts |
|  | • scattergrams |
|  | • run charts |
| *Quality control* **may include:** | • monitoring conformance with specifications |
|  | • recommending ways to eliminate causes of unsatisfactory performance of products or processes |
|  | • monitoring of regular inspections by internal or external agents |
| *Improvements* **may include:** | • formal practices, such as total quality management or continuous improvement |
|  | • improvement by less formal processes which enhance both the product quality and processes of the project, for example client surveys to determine client satisfaction with project team performance |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility for quality management of projects. This will include evidence of managing the work of others within the project team with respect to quality.

## Specific Evidence Requirements

| **Required knowledge and** | • broad knowledge and understanding of: |
|---|---|

| | |
|---|---|
| **understanding include:** | - the principles of project quality management and their application<br>- acceptance of responsibilities for project quality management<br>- use of quality management systems and standards<br>- the place of quality management in the context of the project life cycle<br>- appropriate project quality management methodologies; and their capabilities, limitations, applicability and contribution to project outcomes |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities<br>• project management<br>• quality management<br>• planning and organising<br>• communication and negotiation<br>• problem-solving<br>• leadership and personnel management<br>• monitoring and review skills<br>• attributes:<br>   - analytical<br>   - attention to detail<br>   - able to maintain an overview<br>   - communicative<br>   - positive leadership |
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:<br><br>Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks<br><br>The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to lead a team, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking, monitoring and controlling quality of the project |

| | |
|---|---|
| | • applying relevant skills associated with reviewing the project |
| Planning and organising activities (2) | • planning own work and that of project team members |
| Working in a team (3) | • leading and representing the project team |
| | • working with others, including external parties/clients and project team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in project including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems arising in managing the project |
| | • assisting others to solve problems arising within project |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of project activities, financial reporting and data collation |
| | • using specific project management software tools |
| | • using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in project management |
| **Products that could be used as evidence include:** | • documentation produced in managing projects such as: |

- lists of quality objectives, standards, levels and measurement criteria
- records of inspections, recommended rectification actions and quality outcomes
- management of quality management system and quality management plans
- application of quality control, quality assurance and continuous improvement processes
- records of quality reviews
- lists of lessons learned and recommended improvements

| | |
|---|---|
| **Processes that could be used as evidence include:** | • how quality requirements and outcomes were determined for projects |
| | • how quality tools were selected for use in projects |
| | • how team members were managed throughout projects with respect to quality within the project |
| | • how quality was managed throughout projects |
| | • how problems and issues with respect to quality and arising during projects were identified and addressed |

|  | • how projects were reviewed with respect to quality management |
|  | • how improvements to quality management of projects have been acted upon |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • examples of projects where the candidate has managed quality within projects |
| **Integrated competency assessment means:** | • this unit should be assessed with other project management units at a Diploma qualification, as applicable to the candidate's management role in projects |

# BSBPM506A Manage project human resources

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to undertake human resource management (HRM) within projects. It involves planning for human resources, implementing staff training and development, and managing the project team and stakeholders. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project manager usually performs this function. The functions performed by a program manager to manage human resources within multiple projects are addressed in BSBPM606A Direct human resources management of multiple projects/programs. |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Implement human resource and stakeholder planning activities** | 1.1 Resource requirements for individual tasks are determined, with input from stakeholders and guidance from a higher project authority, to determine project staffing levels and required competencies |
| | 1.2 *Project organisation and structure* designated by a higher authority is established to align individual and group competencies with project tasks |
| | 1.3 Project stakeholders are identified and their expectations verified in order to quantify project outcomes |
| | 1.4 *Staff* are allocated to the project with the approval of a higher project authority to meet work requirements throughout the project life cycle |
| | 1.5 *HRM methods, techniques and tools* are developed and used to implement HRM procedures and plans to ensure clarity of understanding and ongoing human resource management |
| **2. Implement staff training and development** | 2.1 Designated staff responsibilities, authority and individual performance measurement criteria are communicated to the project team and other relevant stakeholders to ensure clarity of understanding of the work and to provide a basis for ongoing assessment |

2.2 Ongoing development and training of project team members is identified, planned, approved by a higher authority and implemented to achieve HRM and overall project objectives

2.3 Individuals' performance is measured against agreed criteria and actions are initiated to overcome shortfalls in performance and encourage career progression

**3. Manage the project team and stakeholders**

3.1 Processes to promote continuous improvement of staff are implemented and actions taken to improve staff and overall project effectiveness

3.2 Internal and external influences on individual and project team member performance and morale are monitored and reported to a higher project authority, if necessary, for remedial action

3.3 Established procedures for interpersonal communication, counselling and conflict resolution are implemented to maintain a positive working environment

3.4 Stakeholder expectations are continually reviewed to resolve expectation variance and ensure the project is on track to deliver expected outcomes

3.5 Inter-project and intra-project conflict is identified and managed to minimise impact on achievement of project objectives

3.6 Human resource and stakeholder management issues and recommended improvements are identified, documented and passed on to a higher project authority for application in future projects

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

**Legislation, codes and national standards relevant to the workplace which may include:**

- award and enterprise agreements and relevant industrial instruments
- relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination
- relevant industry codes of practice

| | |
|---|---|
| ***Project organisation and structure* may be affected by *established organisation responses* to external influences such as*:*** | • relevant legislation, such as anti-discrimination, equal employment opportunity, affirmative action and OHS<br><br>• workplace bargaining<br><br>• accepted work practices |
| ***Staff* may come from*:*** | • within the organisation, such as staff on loan from other projects<br><br>• external to the organisation, such as consultants, auditors and quality assurance specialists |
| ***HRM methods, techniques and tools* may include established organisation responses to:** | • individual and group competency identification and development<br><br>• HRM forecasts, staffing plans and job descriptions<br><br>• staff recruitment and reallocation<br><br>• performance monitoring, assessment and reporting<br><br>• conflict resolution |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility within projects for human resource management for the projects. This will include evidence of managing the work of others within the project team in the area of human resource management.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and** | • broad knowledge and understanding of: |

|  |  |
|---|---|
| **understanding include:** | - the importance of HRM in the project management environment<br>- established organisational policies, standards and methods required to achieve HRM outcomes<br>- the use of established HRM selection, assignment, training, performance evaluation and motivation tools<br>- the conflict and stress issues associated with individuals responsible for project management<br>- human resource matrix management environment<br>- HRM outcomes, critical success and failure criteria and HRM performance measures<br>- the application of interpersonal skills<br>- assessment of interpersonal strengths and weaknesses<br>- the differences in work content, processes and risk that affect HRM requirements in the various phases of the project life cycle |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities<br>• project management<br>• human resources management<br>• planning and organising<br>• communication and negotiation<br>• problem-solving<br>• leadership and personnel management<br>• monitoring and review skills<br>• attributes:<br>   - empathetic<br>   - able to maintain an overview<br>   - communicative<br>   - positive leadership |
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:<br><br>Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks<br><br>The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and | • communicating to lead a team, including negotiating and developing reports |

| information (3) | • communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking and monitoring of project<br>• applying relevant skills associated with reviewing the project |
| Planning and organising activities (2) | • planning own work and that of project team members |
| Working in a team (3) | • leading and representing the project team<br>• working with others, including external parties/clients and project team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in project including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems arising in managing the project<br>• assisting others to solve problems arising within project |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of project activities, financial reporting and data collation<br>• using specific project management software tools<br>• using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in project management |
| **Products that could be used as evidence include:** | • documentation produced in managing projects:<br>  - current and future requirements for competency within the project team<br>  - staffing levels and competencies related to tasks<br>  - job descriptions including measures of performance<br>  - project organisation charts<br>  - staff recruitment and selection criteria<br>  - team and individual responsibilities, levels of authority and performance assessment criteria<br>  - responsibility assignment matrix<br>  - HRM plans and procedures<br>  - records of internal and external influences on HRM performance<br>  - HRM lessons learned |
| **Processes that could be used as** | • how human resources requirements were determined for projects |

|                          |                                                                                                                                                                               |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| **evidence include:**    | • how required human resources were allocated to and/or selected for projects                                                                                                  |
|                          | • how team members were managed throughout projects with respect to human resources management within the project                                                             |
|                          | • how human resources were managed throughout projects including required training and development                                                                            |
|                          | • how problems and issues with respect to human resources and arising during projects were identified and addressed                                                           |
|                          | • how projects were reviewed with respect to human resources management                                                                                                       |
|                          | • how improvements to human resources management of projects were acted upon                                                                                                  |
| **Resource implications for assessment include:** | • access to workplace documentation                                                                                                              |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|                          | • examples of projects where candidate has managed human resources within projects                                                                                            |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at a Diploma qualification as applicable to the candidate's management role in projects |

# BSBPM507A Manage project communications

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to link people, ideas and information at all stages in the project life cycle. Project communications management ensures the timely and appropriate generation, collection, dissemination, storage and disposal of project information through formal structures and processes. It aids in decision making and the control of informal communication networks to facilitate the achievement of project objectives. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | The communications management function covers planning communication processes, managing project related information and reporting requirements, and assessing communications management outcomes against planned outcomes. |
| | A project manager usually performs this function. The functions performed by a program manager to manage communications within multiple projects are addressed in BSBPM607A Direct communications management of multiple projects/programs. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Plan communications processes** | 1.1 Information requirements are identified, documented and analysed, with input from stakeholders and guidance of a higher project authority, as the basis for communications planning |
| | 1.2 Within *delegated authority,* an agreed communications management plan is developed to ensure clarity of understanding and achievement of project objectives throughout the project life cycle |
| | 1.3 Designated *project management information system*, structure and procedures are established and maintained to ensure the quality, validity, timeliness and integrity of information and communication |
| **2. Manage information** | 2.1 The generation, gathering, storage, retrieval, analysis and dissemination of information by project staff and stakeholders is managed within established systems and procedures to aid decision making processes throughout the project life cycle |

|   |   |   |
|---|---|---|
|   | 2.2 | Designated information validation processes are implemented, modified, monitored and controlled to optimise quality and accuracy of data |
|   | 2.3 | Agreed *communication networks* between project staff, client and other stakeholders are implemented and maintained to ensure effective communications at appropriate levels throughout the project life cycle |
| **3. Manage project reporting** | 3.1 | Communication and information management system problems are identified and reported to a higher project authority, and agreed remedial actions are implemented to ensure project objectives are met |
|   | 3.2 | Customer relationships are maintained within established guidelines to ensure clarity of understanding of objectives and to reduce conflict throughout the project life cycle |
| **4. Assess communications management outcomes** | 4.1 | Finalisation activities are conducted to ensure agreed ownership of, and responsibility for, information collected |
|   | 4.2 | Project outcomes are reviewed to determine the effectiveness of management information and communications processes and procedures |
|   | 4.3 | Lessons learned and recommended improvements are identified, documented and passed on to a higher project authority for application in future projects |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| ***Delegated authority* means that activities may:** | • be done independently within broad guidance or by taking the lead of a team |
| | • involve consultation with other project members, teams and internal stakeholders |

| | |
|---|---|
| | • involve the selection, use and supervision of appropriate communications management methods and tools |
| | • be conducted routinely or as changing circumstances dictate |
| | • take into account internal organisational change and external environmental change |
| A *Project Management Information System (PMIS)* **is:** | • a means for communicating knowledge about the project and provides a systematic approach to the storing, searching and retrieval of information relevant to the project, and may include: |
| | • simple manual systems |
| | • complex computer-based systems |
| | • modified systems to cater for unique project requirements |
| *Communication networks* **may include:** | • formal networks |
| | • informal networks |
| | • specific networks |
| | • the  rganization's communication networks |
| | • client  rganization and end users |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility within projects for managing communications. This will include evidence of managing the work of others within the project team with respect to communications.

**Specific Evidence Requirements**

| | |
|---|---|
| **Required knowledge and understanding include:** | • broad knowledge and understanding of:<br>  - the principles of communications management and their application<br>  - acceptance of responsibilities for communications management<br>  - maintenance of project management information systems and communications networks<br>  - drafting, vetting, approving, obtaining endorsement and forwarding reports to a higher authority<br>  - the place of communications management in the context of the project life cycle and other project management functions<br>  - appropriate communication management technologies; their capabilities, limitations, applicability and contribution to project outcomes |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities<br>• project management<br>• planning and organising<br>• communication and negotiation<br>• problem-solving<br>• leadership and personnel management<br>• monitoring and review skills<br>• attributes:<br>  - organised<br>  - able to maintain an overview<br>  - communicative<br>  - positive leadership |
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:<br><br>Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks<br><br>The bulleted points provide examples of how the key competencies can be applied for this unit |

| | |
|---|---|
| Communicating ideas and information (3) | • communicating to lead a team, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking, monitoring and control of project communications<br>• applying relevant skills associated with reviewing the project |
| Planning and organising activities (2) | • planning own work and that of project team members |
| Working in a team (3) | • leading and representing the project team<br>• working with others, including external parties/clients and project team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in project including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems arising in managing the project<br>• assisting others to solve problems arising within project |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of project activities, financial reporting and data collation<br>• using specific project management software tools<br>• using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in project management |
| **Products that could be used as evidence include:** | • documentation produced in managing projects such as:<br>  - communications management plans<br>  - PMIS structure and procedures<br>  - progress reports<br>  - records of collection, validation, storage, retrieval, analysis and/or dissemination of information<br>  - records of meetings<br>  - post-validation process modifications<br>  - communications networks<br>  - records of communications problems and solutions |

| | |
|---|---|
| **Processes that could be used as evidence include:** | • how information requirements were determined for projects |
| | • how communication plans and associated processes were developed for projects |
| | • how team members were managed throughout projects with respect to communications management within the project |
| | • how information was managed during projects |
| | • how project reporting processes were managed during projects |
| | • how problems and issues with respect to communications and arising during projects were identified and addressed |
| | • how projects were reviewed with respect to communications management |
| | • how improvements to communications management of projects have been acted upon |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • examples of projects where the candidate has managed communications within projects |
| **Integrated competency assessment means:** | • this unit should be assessed with other project management units at a Diploma qualification, as applicable to the candidate's management role in project as part of an integrated assessment activity |

# BSBPM508A Manage project risk

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|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to manage risk within a project in order to avoid adverse effects on project outcomes. It covers determining, monitoring and controlling project risks, and assessing risk management outcomes. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project manager usually performs this function. The functions performed by a program manager to manage risks within multiple projects are addressed in BSBPM608A Direct risk management of multiple projects/programs. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Determine project risks** | 1.1 *Risks* are identified, documented and analysed, in consultation with stakeholders and a higher project authority, as the basis for risk planning |
| | 1.2 Within *delegated authority*, established *risk management techniques and tools* are used to analyse risks and assess options, and preferred risk approaches are recommended to a higher authority |
| | 1.3 Plans are developed, agreed with stakeholders, and communicated to ensure clarity of understanding and ongoing management of risk factors |
| | 1.4 Designated *risk management processes and procedures* are established to enable effective management and communication of risk events, responses and results |
| **2. Monitor and control project risk** | 2.1 Project is managed in accordance with established project and risk management plans to ensure a common approach to the achievement of objectives |
| | 2.2 Progress is monitored against project plans to identify variances and *recommend responses* to a higher project authority for remedial action |
| | 2.3 Agreed risk responses are implemented and plans modified to reflect changing project objectives in an environment of uncertainty |
| **3. Assess risk management outcomes** | 3.1 Project outcomes are reviewed to determine effectiveness of risk management processes and procedures |

3.2 Risk issues and recommended improvements are identified, documented and passed on to a higher project authority for application in future projects

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| *Risks* **may be:** | • potential<br>• perceived<br>• actual<br>• likely/probable |
| *Delegated authority* **refers to planning and activities that may:** | • be done independently within broad guidance or by taking the lead of a team<br>• involve consultation with other project members, teams and internal stakeholders<br>• involve the selection, use and supervision of appropriate risk management methods, tools and techniques<br>• be conducted routinely or as changing circumstances dictate |
| *Risk management techniques and tools* **may include:** | • calling upon personal experience and/or subject matter experts<br>• conducting or supervising qualitative and/or quantitative risk analysis, such as schedule simulation, decision analysis, contingency planning and alternative strategy development<br>• using specialist risk analysis tools to assist in the decision making process |
| *Risk management processes and procedures* **may include:** | • setting key milestones at significant points during the project and at completion<br>• measurement of actual progress against planned milestones<br>• recording and reporting of major variance<br>• implementation of risk control trigger mechanisms |

| | |
|---|---|
| | • communication with stakeholders, dispute resolution, and modification procedures |
| *Recommended responses* to variations may be made: | • independently or with higher project authority endorsement if necessary |
| | • regularly throughout the project life cycle |
| | • in consultation with project team members, section heads, project manager and stakeholders |
| | • taking into account internal organisational change and external environmental change |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility within projects for risks associated with the projects. This will include evidence of managing the work of others within the project team with respect to risk management within the project.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • broad knowledge and understanding of:<br>  - uncertainty and the means of its measurement<br>  - personal attitudes to uncertainty and risk, and how they might affect the project's approach to risk management<br>  - the place of risk management in the context of the project life cycle<br>  - appropriate risk management methodologies, their capabilities, limitations, applicability and outcomes |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities |
| | • project management |
| | • risk management |
| | • planning and organising |
| | • communication and negotiation |
| | • problem solving |
| | • leadership and personnel management |
| | • monitoring and review skills |
| | • attributes: |

|  |  |
|---|---|
|  | - attention to detail |
|  | - able to maintain an overview |
|  | - positive leadership |
|  | - analytical |
|  | - organised |
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
|  | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
|  | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to lead a team, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking and monitoring the project<br>• applying relevant skills associated with reviewing the project |
| Planning and organising activities (2) | • planning own work and that of project team members |
| Working in a team (3) | • leading and representing the project team<br>• working with others including external parties/clients and project team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in project including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems arising in managing the project<br>• assisting others to solve problems arising within project |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of project activities, financial reporting and data collation<br>• using specific project management software tools<br>• using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in project management |

| | |
|---|---|
| **Products that could be used as evidence include:** | • documentation produced in managing projects such as: |
| |    - application of lessons learned from previous project(s) in planning a new project |
| |    - lists of potential risk events |
| |    - records of identification and prioritisation of risk events |
| |    - risk management plans |
| |    - reports of variance and recommendations for action |
| |    - details of conduct of risk reappraisal |
| |    - risk management lessons learned |
| **Processes that could be used as evidence include:** | • how risks were identified and documented for projects |
| | • how a risk management plan was developed for projects |
| | • how team members were managed throughout projects with respect to risk management |
| | • how risk was managed during projects |
| | • how risks arising during projects were identified and addressed |
| | • how projects were reviewed with respect to risk management |
| | • how improvements to risk management of projects have been acted upon |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • examples of projects where the candidate has managed risks within projects |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at a Diploma qualification, as applicable to the candidate's management role in projects |

# BSBPM509A Manage project procurement

| | |
|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to undertake procurement and contract management within projects. It covers determining procurement requirements, establishing agreed procurement processes, conducting contracting and procurement activities, and managing finalisation processes. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A project manager usually performs this function. The functions performed by a program manager to manage procurement within multiple projects are addressed in BSBPM609A Direct procurement and contracts of multiple projects/programs. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Determine procurement requirements** | 1.1 Procurement requirements are identified, with input from stakeholders and guidance of a higher project authority, as the basis for procurement planning and the contract |
| | 1.2 Within *delegated authority*, an agreed *procurement management plan* and strategies are established and maintained to ensure clarity of understanding between stakeholders and achievement of project objectives |
| **2. Establish agreed procurement processes** | 2.1 Information is obtained from established sources capable of fulfilling procurement requirements to determine how project objectives can be met |
| | 2.2 Established selection processes and selection criteria (including OHS requirements) are adopted and communicated to stakeholders and prospective contractors or suppliers to ensure fair competition |
| | 2.3 Approvals for procurement processes to be used for the project are obtained from a higher project authority to enable formal discussions to be conducted |
| **3. Conduct contracting and procurement activities** | 3.1 Agreed proposals and/or specifications are communicated to prospective contractors or suppliers to ensure clarity of understanding of project objectives |

| | 3.2 | Responses are evaluated and preferred contractors or suppliers are selected in accordance with current legal requirements and agreed selection processes |
|---|---|---|
| | 3.3 | Negotiations are conducted with the preferred contractor or supplier, with guidance of a higher project authority if necessary, to agree on contract terms and conditions, establish common goals and minimise uncertainty |
| **4. Implement the contract and/or procurement** | 4.1 | Established procurement management plan is implemented and *modifications* made with a higher project authority approval to ensure a common approach to achievement of objectives |
| | 4.2 | Progress is reviewed and agreed changes are managed to ensure timely completion of tasks, resolution of conflicts and achievement of project objectives within the legal framework of the contract |
| | 4.3 | Procurement management problems are identified and reported to a higher project authority, and agreed remedial actions are implemented to ensure project objectives are met |
| **5. Manage contract and procurement finalisation procedures** | 5.1 | Finalisation activities are conducted to ensure contract deliverables meet contractual requirements |
| | 5.2 | Project outcomes are reviewed using available *procurement records and information* to determine the effectiveness of contracting and procurement processes and procedures |
| | 5.3 | Lessons learned and recommended improvements are identified, documented and passed on to a higher project authority for application in future projects |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
|---|---|
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |

| | |
|---|---|
| ***Delegated authority* refers to planning and activities that may:** | • be done independently within broad guidance or by taking the lead of a team |
| | • involve consultation with other project members, teams and internal stakeholders |
| | • involve the selection, use and supervision of appropriate procurement management methods, tools and techniques |
| | • be conducted routinely or as changing circumstances dictate |
| | • take into account internal organisational change and external environmental change |
| **A *procurement management plan* identifies and outlines*:*** | • procurement objectives, strategies and timelines |
| | • resources to be obtained against a timeline and budget |
| | • processes to be used for procurement of resources |
| | • responsibilities for staff/team members |
| | • how procurement arrangements are communicated to stakeholders |
| | • the process for monitiring and evaluating procurement related to the project |
| ***Modifications* may be made:** | • independently or with higher project authority endorsement if necessary |
| | • regularly throughout the project life cycle |
| | • in consultation with project team members, section heads, project manager and stakeholders |
| | • taking into account internal organisational change and external environmental change |
| ***Procurement records and information* may include:** | • product specifications |
| | • procurement management plan |
| | • contract documentation |
| | • contractor selection criteria, processes and recommendations |
| | • contract negotiation documentation |
| | • contract change proposals and approvals |
| | • test and acceptance procedures and documentation |
| | • contract discharge and asset disposal register |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility within projects for procurement and contract management. This will include evidence of managing the work of others within the project team with respect to procurement and contract management.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • broad knowledge and understanding of: <br> - the principles of procurement management and their application <br> - the principles of contracts and contractual legal requirements from the project management perspective <br> - the selection of appropriate formal arrangements and the legal implications of such agreements <br> - contract negotiation skills <br> - procurement management processes and procedures <br> - OHS legislative requirements |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities <br> • project management <br> • contract management <br> • planning and organising <br> • communication and negotiation <br> • problem-solving <br> • leadership and personnel management <br> • negotiation <br> • monitoring and review skills <br> • attributes: <br> - attention to detail <br> - able to maintain an overview <br> - thoroughness <br> - positive leadership |

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
|---|---|
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
| | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to lead a team, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (2) | • tracking and monitoring the project<br>• applying relevant skills associated with reviewing the project |
| Planning and organising activities (2) | • planning own work and that of project team members |
| Working in a team (3) | • leading and representing the project team<br>• working with others, including external parties/clients and project team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in project including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems arising in managing the project<br>• assisting others to solve problems arising within project |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of project activities, financial reporting and data collation<br>• using specific project management software tools<br>• using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in project management |
| **Products that could be used as evidence include:** | • product specifications<br>• procurement management plans<br>• contract documentation<br>• records of evaluation and selection of preferred contractors<br>• records of involvement in contract negotiations |

|  | • progress measurement and conflict resolution process records |
|---|---|
|  | • contract change procedures and documentation |
|  | • records of test and acceptance procedures and documentation |
|  | • records of contract discharge procedures and documentation |
|  | • records of procurement lessons learned and recommended improvements |
| **Processes that could be used as evidence include:** | • how procurement requirements were identified and documented for projects |
|  | • how procurement management plan was developed for projects |
|  | • how team members were managed throughout projects with respect to management of procurement within the project |
|  | • how procurement was managed during projects |
|  | • how procurement problems and issues arising during projects were identified and addressed |
|  | • how contract finalisation activities were managed |
|  | • how project was reviewed with respect to procurement management |
|  | • how improvements to procurement management for projects have been acted upon |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • examples of projects where the candidate has managed procurement within projects |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at a Diploma qualification, as applicable to the candidate's management role in projects of |

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# BSBPM601A Direct the integration of multiple projects/programs

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| **Unit Descriptor** | This unit specifies the outcomes required to manage the integration of all functions of project management in a program or multiple project context. |
| | This covers managing conflicting priorities between projects, directing project managers in re-aligning projects within the program, directing the internal environment with the needs and expectations of the external environment, and directing projects within the program throughout their life cycle. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A *program* is defined as a set of interrelated projects, each of which has a project manager. *Multiple projects* (sometimes referred to as a portfolio of projects) means a number of projects which may or may not be related but which are all managed by the same person as a program to achieve a common organisational objective(s). |
| | For the purposes of this unit both types will be referred to as a program and managers as program managers. |
| | The functions performed by a project manager to manage integration within individual projects are addressed in BSBPM501A Manage application of project integrative processes. |
| | It should be noted that conflicting priorities between projects are managed with higher project authority support, in this case project governance committees or senior management. |

| Element | Performance Criteria |
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| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Direct integration of all functions of project management** | 1.1 Project managers are supported in project stakeholder analysis to determine the influence of others on project outcomes |
| | 1.2 The requirements of all projects and the multiple inter-relationships of *project management functions* are analysed, rationalised and integrated to determine agreed, *achievable program objectives* that align to organisational goals, strategies and objectives as stated in strategic planning documentation |
| | 1.3 Project plans are reviewed, rationalised and, when approved, integrated into a structured, cohesive program plan for ongoing program management |

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|  | 1.4 | Integrated program control mechanisms are derived from project plans to establish program control requirements |
|  | 1.5 | Project plans are used to develop consolidated program budgets, schedules and interdependencies, and to identify program risks |
| **2. Direct the internal project environment to meet external needs and expectations** | 2.1 | The *internal project working environment* is directed to ensure project managers' work is conducted effectively throughout multiple, aligned project life cycles |
|  | 2.2 | Links are established and maintained to direct the alignment between projects and organisation objectives within the program |
|  | 2.3 | Project proposals (scope definitions) are evaluated against the organisation's strategic objectives |
|  | 2.4 | Conflicting requirements of individual projects are coordinated and directed to achieve program objectives |
|  | 2.5 | Where necessary individual project objectives are modified to achieve overall program objectives |
|  | 2.6 | The impact of *external environmental influences* on individual projects is coordinated to achieve program objectives |
| **3. Direct projects throughout project life cycles** | 3.1 | All project managers are directed to provide project phases, approval points, review points and other milestones, to allow program integration |
|  | 3.2 | Project baselines are established and progress is reported in relation to baselines, to measure program performance throughout the business reporting cycle |
|  | 3.3 | Project baselines are reviewed progressively to ensure nominated benefits are consistent with organisational expectations |
|  | 3.4 | *Finalisation plans, procedures and activities* are directed to ensure final outcomes are met and that projects meet agreed program objectives |
|  | 3.5 | Projects finalised in a program management reporting period are reviewed to evaluate benefits to the business |
|  | 3.6 | Integration management lessons learned are passed to higher project authority and feedback is provided for application to other projects |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

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| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| **The *project management functions* are:** | • scope<br>• time<br>• cost<br>• quality<br>• human resources<br>• communications<br>• risk<br>• procurement |
| ***Achievable program objectives* may include:** | • the client's objectives, for example maximum value for money, or maximum performance at minimum cost<br>• the supplier/contractor's objectives, for example minimum cost, minimum time and acceptable quality<br>• end-user(s) objectives, for example maximum performance as well as optional extras<br>• higher project authorities' objectives (that is, management/projects governance group), for example reputation, retention of market share, buying into market within the constraints of performance, time, cost, quality, resources and skills<br>• the organisation's objectives, for example quantifiable benefits |
| **The *internal project working environment* may include:** | • physical location of projects within the organisation<br>• physical location of program project managers, personnel and equipment<br>• computing support and integrated computer networks<br>• personal working conditions (physical and emotional)<br>• teams and interpersonal dynamics<br>• identity and differentiation of the program's projects within the larger environment |
| **The *external environmental influences* may include:** | • the parent organisation, enterprise and/or industry<br>• employee representative groups, such as unions, professional associations and lobby groups |

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| ***Finalisation plans, procedures and activities* may include:** | • political, environmental and societal influences |
| | • public and media interest |
| | • the physical environment, for example geography, ecology and environmental sensitivity |
| | • external stakeholder expectations |
| | • transition of responsibility/ownership of projects' deliverables/products for those projects that concluded in a reporting/management period (such as financial year) |
| | • assessment of stakeholder satisfaction against expectations |
| | • evaluation of projects for benefits derived |
| | • evaluation of projects completed in a reporting period |
| | • review of success/failure criteria for projects completed in a given reporting period |
| | • settling of financial liabilities for projects completed in a consolidated budget context |
| | • forwarding program progress report to higher projects governance authority |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility across multiple projects or a program for integrating all project management functions (scope, time, cost, quality, human resources, communications, risk and procurement) within and between projects. This will include evidence of directing the work of project managers and others in the internal and external environment.

**Specific Evidence Requirements**

**Required knowledge and understanding include:**

a detailed knowledge and understanding of:

- the project process, the project life cycle, the relationship between project phases, and interdependencies/relationships between projects
- program planning and control procedures, resource levelling and rationalisation management and risk management
- a range of suitable methodologies, techniques and tools available to both project managers and to program managers
- the need for and application of leadership and management within a project's management environment
- internal and external environment factors that may affect the program of projects

**Required skills and attributes include:**

- ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities
- project and program management
- high level leadership and personnel management
- analytical skills
- communication skills
- planning and organising
- maintaining an overview of projects/programs
- delegation
- attributes:
    - communicative
    - positive leadership

**Key competencies or generic skills relevant to this unit**

The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:

Level (1) represents the competence to undertake tasks effectively
Level (2) represents the competence to manage tasks
Level (3) represents the competence to use concepts for evaluating and reshaping tasks

The bulleted points provide examples of how the key competencies can be applied for this unit

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| Communicating ideas and information (3) | • communicating to manage teams, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (3) | • tracking and monitoring multiple projects<br>• applying relevant skills associated with reviewing multiple projects |
| Planning and organising activities (3) | • planning own work and directing that of project managers |
| Working in a team (3) | • managing project managers<br>• working with others, including external parties/clients and project managers and team members |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in projects including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems and conflicting requirements arising in managing programs of multiple projects<br>• assisting others to solve problems arising within their projects |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of program activities, financial reporting and data collation<br>• using specific project and program management software tools<br>• using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in the project's management environment |
| **Products that could be used as evidence include:** | • documentation produced in managing the program/directing projects such as:<br>  - records of rationalisation/integration processes to determine achievable program objectives<br>  - program plans and control mechanisms covering the coordination of multiple projects' outcomes<br>  - maintenance of processes for linking and coordination of program control mechanisms<br>  - records of organisation and other environmental impact analysis<br>  - program (integrated) schedules and budgets |

- records of coordination and tracking of multiple projects interdependencies and program resource levelling

- records of establishment, measurement and reporting of progress in relation to program baselines

- records of use of benefits identification, tracking and realisation tables

- program finalisation plans (aligned to organisational management periods, such as the financial year)
- lists of integration management lessons learned

**Processes that could be used as evidence include:**
- how program planning is coordinated through direction of projects
- how projects are monitored during the program life cycle
- how problems and conflicting requirements arising in the program are addressed and managed
- how multiple projects' progress is measured throughout the program
- how projects are finalised in the context of a program management/reporting period
- how projects are reviewed and lessons learned are used in future projects within the program

**Resource implications for assessment include:**
- access to workplace documentation

**Validity and sufficiency of evidence requires:**
- that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment
- examples of where the candidate has managed integration across projects in a program

**Integrated competency assessment means:**
- that this unit should be assessed with other project management units at an Advanced Diploma qualification, as applicable to the candidate's management role in projects/programs

# BSBPM602A Direct the scope of multiple projects/programs

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| **Unit Descriptor** | This unit specifies the outcomes required to direct the scope of projects within a program or multiple projects context. It covers the management of authorising projects, and defining, planning and managing the program scope. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A *program* is defined as a set of interrelated projects, each of which has a project manager. *Multiple projects* (sometimes referred to as a portfolio of projects) means a number of projects which may or may not be related but which are all managed by the same person as a program to achieve a common organisational objective(s). |
| | For the purposes of this unit both types will be referred to as a program and managers as program managers. |
| | The functions performed by a project manager to manage scope within individual projects are addressed in BSBPM502A Manage project scope. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Authorise projects** | 1.1 *Needs* are analysed, in consultation with client and other stakeholders if necessary, to justify each project and for the designation of project managers |
| | 1.2 Project selection and prioritisation are conducted within guidelines provided by, or under direction of, a higher project (governance) authority |
| | 1.3 *Project authorisation recommendations* are made to a higher project authority as the basis for future projects management activity and commitment of resources and effort |
| **2. Define and plan program scope** | 2.1 Projects' objectives, major deliverables and resource requirements are defined at the project and program level, and are confirmed with the governance group or a higher project authority |
| | 2.2 Measurable projects' outcomes and benefits are determined and agreed, to enable quantified evaluation of program performance |
| | 2.3 Scope definition, *scope management* strategies and plans are developed, agreed and communicated |

|  | 2.4 | Program scope is aligned to business requirements and organisational strategy |
|---|---|---|
| **3. Manage program scope** | 3.1 | Regular program reviews are conducted to measure *project performance* and to ensure that stated program and business/strategic objectives are met |
|  | 3.2 | *Change management system* is established and maintained to form the basis of ongoing scope management |
|  | 3.3 | The effects of potential, perceived and actual projects' *scope changes* are reviewed and action is taken to ensure that project and program objectives are achieved or modified |
|  | 3.4 | Projects' outcomes are compared against defined program scope and aligned strategic objectives |
|  | 3.5 | Results of program outcomes are communicated |
|  | 3.6 | Scope management lessons learned are passed to a higher project authority and feedback is provided for application in planning and implementation of later projects within the program |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
|---|---|
| *Needs* **may be:** | • outcome-oriented, for example to fulfil needs<br>• product-oriented, for example to acquire new computer systems or buildings<br>• improvement-oriented, for example to find a better ways of doing something<br>• activity-oriented, for example to stage major sporting events |
| *Project authorisation recommendations* **may include:** | • broad details of required project outcomes and objectives<br>• major projects phases, activities and milestones that will require timing coordination across the program (particularly as new approved projects enter the program) |

*Scope management*
**may include:**

- project managers' terms of reference, and authorisations and limitations directed by the program manager
- relationship between multiple project objectives and the programs and therefore strategic objectives of the organisation
- progressive refinement of scope throughout multiple project life cycles
- controlling program scope creep, that is incremental increases to scope to accommodate wishes rather than needs
- managing factors which influence changes to scope
- determining that a scope change has occurred or is about to occur
- managing scope changes when they occur
- managing the effect of scope changes on other areas and on achievement of multiple project objectives

*Project performance*
**may include:**

- measurement of time and resources spent on the projects, as compared to baseline data
- use of tools and techniques to manage and measure projects' progress in terms of time and resources

*Change management system*
**may include:**

- documentation
- risk analysis
- impact analysis
- configuration management
- change to control boards/committees

*Scope change reviews*
**may include:**

- major elements of the program liable to change, for example deletion of a line of business endeavour, new projects prioritising program and deletion of poorly performing projects
- program documentation, including plans, integrated schedules, integrated budgets and integrated (program) risk analysis
- formal agreements, that is contracts, sub-contracts and memoranda of understanding

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility across multiple projects or a program for directing and authorising scoping of the projects. This will include evidence of managing the work of project managers and others working within project teams.

## Specific Evidence Requirements

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| **Required knowledge and understanding include:** | • a detailed knowledge and understanding of the place of scope management in the context of a projects delivery environment, particularly the relationship between program scope and: |
| | - the performance, time, cost and quality of projects |
| | - the processes of justification and authorisation of projects |
| | - the importance of scope definition especially during projects start-up, and ongoing throughout the project life cycles |
| | - the importance of, and techniques related to, project performance measurement and management |
| | - the importance of, and techniques related to, the definition of multiple projects |
| | - the impact of balancing and levelling resource requirements for achieving overall organisational objectives |
| | - the principles of change management and their application |
| | - appropriate scope management methodologies, techniques and tools, their applicability, capabilities and limitations |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities |
| | • program management |
| | • high level leadership and personnel management |
| | • analytical skills |
| | • communication skills |
| | • planning and organising |
| | • maintaining an overview of projects/programs |

- delegation
- attributes:
  - communicative
  - positive leadership

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:<br><br>Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks<br><br>The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to manage teams, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (3) | • tracking and monitoring a program of projects<br>• applying relevant skills associated with reviewing projects<br>• collating multiple projects' information for business reporting against strategic objectives |
| Planning and organising activities (3) | • planning own work and that of project managers |
| Working in a team (3) | • managing the program and key personnel (project managers and business level personnel)<br>• working with others including external parties/clients |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in projects including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems and conflicting requirements arising in managing the program<br>• assisting others to solve problems arising within the program |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of program activities, financial reporting and data collation<br>• using specific program management software tools<br>• using assistive technology, if required |

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| Innovation skills (2) | • using review process to inform future activity in program management |
| **Products that could be used as evidence include:** | • documentation produced in managing the program and directing projects such as:<br>  - requirements definition and needs analysis documentation<br>  - documentation aligning business directions to program and therefore multiple project objectives<br>  - program charter/directive<br>  - program manager's terms of reference<br>  - program scope statement<br>  - program definition terms of reference<br>  - work breakdown, product breakdown and organisation breakdown structures<br>  - project performance management records<br>  - formal agreements, that is contracts, sub-contracts, memoranda of understanding<br>  - records of management of change management system and procedures<br>  - records of program scope lessons learned |
| **Processes that could be used as evidence include:** | • how project authorisations were managed<br>• how project scopes were defined in a program context and agreement gained between program manager and the business<br>• how expected program performance was determined<br>• how project managers were given direction throughout projects with respect to the scope of the projects<br>• how the need for scope changes within projects were identified and authorised<br>• how projects/programs were reviewed with respect to the scope of the projects<br>• how improvements to scope management of projects have been used in future projects |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment<br>• examples of where the candidate has managed program scope and directed scope across projects |

**Integrated competency
assessment means:**

- that this unit should be assessed with other project management units at an Advanced Diploma qualification, as applicable to the candidate's management role in projects/programs

# BSBPM603A Direct time management of multiple projects/programs

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|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to direct time management across projects, so that key deliverables meet project and program schedules. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A *program* is defined as a set of interrelated projects, each of which has a project manager. *Multiple projects* (sometimes referred to as a portfolio of projects) means a number of projects which may or may not be related but which are all managed by the same person as a program to achieve a common organisational objective(s). |
| | For the purposes of this unit both types will be refered to as a program and managers as program managers. |
| | The functions performed by a project manager to manage time and scheduling within individual projects are addressed in BSBPM503A Manage project time. |

| **Element** | **Performance Criteria** |
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| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Direct project schedules development** | 1.1 The duration and effort, sequence and interdependencies of major activities and milestones are determined from individual project plans to form the basis of the program schedule |
| | 1.2 Project managers are directed by the use of *time management* methods, *techniques and tools,* preferred schedules, *time management plans*, resource allocation and financial requirements to enable continuing update and refinement of the program schedule |
| | 1.3 Project schedules are agreed, formalised and communicated to stakeholders as the basis for planning, implementation and review of progress |
| **2. Manage program schedules** | 2.1 Mechanisms are developed, implemented and modified to monitor, control, record and report actual progress in relation to the agreed schedule and plans |
| | 2.2 Ongoing analysis is conducted to identify and forecast variances and trends, and to develop responses so that projects meet their schedules |

2.3 Durations of key activities and interdependencies between projects are managed to enable financial and resource rationalisation across the program of projects, to meet strategic expectations within the management/reporting period of the program

2.4 Progress is reviewed and the schedule is refined throughout the program life cycle to ensure consistency with changing scope, objectives and constraints related to time and resource availability

2.5 Responses to perceived, potential or actual projects' schedule changes are authorised to achieve program objectives

**3. Analyse time management outcomes**

3.1 Multiple project and program outcomes are reviewed from available *records* and information and analysed to determine the effectiveness of the schedule and time management processes

3.2 Lessons learned are passed to a higher project authority and feedback is provided for application in planning and implementation of later projects within the program

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
|---|---|
| *Time management* **may:** | • be done by taking the lead in a team environment<br>• involve consultation with project managers and selective involvement of stakeholders<br>• involve the direction of the use of appropriate time management methods, processes, procedures, tools and techniques<br>• be conducted non-routinely to meet complex, changing circumstances<br>• take into account the impact of organisational and environmental change on the program's projects and vice versa |

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| ***Techniques and tools*** **may include:** | • using personal experience and/or subject matter experts |
| | • directing qualitative and/or quantitative time analysis, such as schedule simulation, decision analysis, contingency planning and alternative strategy development |
| | • collating and using the products of specialist time analysis to make program-wide time management decisions |
| | • assessing and reporting the potential impact of multiple project timings and their potential for change on the program, and therefore the organisation |
| ***Time management plans*** **may include:** | • program consolidated schedule |
| | • sub-schedules |
| | • important milestones and critical interdependencies between projects |
| | • alternative schedule management strategies and actions |
| | • formal arrangements |
| | • responsibility assignment |
| | • contingency plans |
| | • assigned schedule management responsibilities |
| ***Records*** **may take the form of:** | • lists of variances, trends and forecasts of potential schedule events |
| | • Gantt, PERT and other scheduling charts |
| | • diaries, incident logs, occurrence reports and other such documentation |
| | • records of analysis, evaluation of options and selection processes |
| | • records of responses, results and lessons learned |
| | • program and/or organisation files and records |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility across multiple projects or a program for managing time and scheduling of the projects. This will include evidence of managing the output of work of others including project managers and a range of stakeholders including higher management.

**Specific Evidence Requirements**

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|---|---|
| **Required knowledge and understanding include:** | • a detailed knowledge and understanding of: |

- the principles of program management and its application
- organisational policies, guidance and attitudes to time management
- the relationship between time, cost and resources to the project management framework
- delegation and management of responsibilities for time management
- direction of project schedules management
- use of the schedule as a control mechanism
- appropriate time management and estimating methodologies, techniques and tools, their capabilities and limitations, applicability and outcomes
- the differences in work content, risk, processes, tools and techniques that apply in the various phases of recurring project life cycles within a volatile program environment

**Required skills and attributes include:**

- ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities
- program management
- time management and scheduling
- high level leadership and personnel management
- analytical skills
- communication skills
- planning and organising
- maintaining an overview of projects/programs
- delegation
- attributes:
  - communicative
  - positive leadership

**Key competencies or generic skills relevant to this unit**

The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:

Level (1) represents the competence to undertake tasks effectively
Level (2) represents the competence to manage tasks
Level (3) represents the competence to use concepts for evaluating and reshaping tasks

The bulleted points provide examples of how the key competencies can be applied for this unit

| | |
|---|---|
| Communicating ideas and information (3) | • communicating to manage teams, including negotiating and developing reports |
| | • communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (3) | • tracking and monitoring major milestones of projects |
| | • applying relevant skills associated with reviewing projects and programs |
| Planning and organising activities (3) | • planning own work and that of project managers |
| Working in a team (3) | • managing the projects delivery environment, down to project mangers and up to a higher authority |
| | • working with others, including external parties/clients |
| | • being the link between expectations of management and the aspirations, constraints and issues of project managers and their teams |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in the program including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems and conflicting requirements arising in managing the program |
| | • assisting others to solve problems arising within projects |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of program activities, financial reporting and data collation |
| | • using specific program management software tools |
| | • using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in program management |
| **Products that could be used as evidence include**: | • documentation produced in managing the program and directing projects such as: |
| | - application of lessons learned from previous project(s) in authorising new projects |
| | - time management strategies |
| | - time management analysis, forecasts and predictions |

|  | - program work breakdown structure |
|  | - key activity schedules |
|  | - application of precedence and dependency principles to determine major activities rationalisation and interdependencies for the program |
|  | - program schedule |
|  | - records of regular and ad hoc communication about schedules to stakeholders |
|  | - application of and modifications to monitoring, review and reporting mechanisms |
|  | - application of actual progress against planned progress |
|  | - records of corrective actions taken against variances in the program schedule |
|  | - records of lessons learned |
| **Processes that could be used as evidence include:** | • how project schedules management was directed and the program schedule managed |
|  | • how agreement on schedules was reached with relevant parties |
|  | • how project managers were directed throughout the project with respect to time management within projects |
|  | • how schedules were coordinated and managed throughout the program |
|  | • how problems and issues with time management were identified and addressed |
|  | • how projects were reviewed with respect to time management of the program |
|  | • how improvements to time management of projects were used in future projects within the program |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • examples of where the candidate has managed time and scheduling across multiple projects/programs |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at an Advanced Diploma qualification, as applicable to the candidate's management role in projects/programs |

# BSBPM604A Direct cost management of multiple projects/programs

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| **Unit Descriptor** | This unit specifies the outcomes required to analyse, coordinate, and refine the budgets of multiple projects that contribute to an overall program budget. It covers directing project budget development, managing program costs, and directing financial completion of projects. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A *program* is defined as a set of interrelated projects, each of which has a project manager. *Multiple projects* (sometimes referred to as a portfolio of projects) means a number of projects which may or may not be related but which are all managed by the same person as a program to achieve a common organisational objective(s). |
| | For the purposes of this unit both types will be refered to as a program and managers as program managers. |
| | The functions performed by a project manager to manage costs within individual projects are addressed in BSBPM504A Manage project costs. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Direct project budget development** | 1.1 Project managers are directed to determine resource requirements for individual tasks, in consultation with appropriate stakeholders, to develop a project budget which contributes to the program budget |
| | 1.2 Project *cost estimation* is directed to enable budgets and cost management processes to be developed for the project life cycles |
| | 1.3 Cost strategies and *cost management plans* are directed and authorised to ensure clarity of understanding and ongoing *management of project finances* and the program budget overall |
| **2. Manage program costs** | 2.1 *Cost management systems* are developed and maintained to direct monitoring of actual expenditure and to control costs throughout multiple project life cycles and for the program overall |

| | 2.2 | Analysis is conducted, options are evaluated and responses to project cost variations are implemented to maintain control over changing financial and overall program objectives |
|---|---|---|
| | 2.3 | Internal and external influences on program costs are monitored and, where necessary, approval is sought from business management for changes to the approved program budget |
| **3. Direct financial completion** | 3.1 | Direction is provided for project *finalisation activities* to achieve integrated financial and physical project completion within program and therefore client and organisational expectations |
| | 3.2 | Project outcomes are reviewed from available *records* at the finalisation of each project, and information is analysed to determine the effectiveness of cost management systems |
| | 3.3 | Program lessons learned are kept as a resource for future reference and, where necessary, referred to a higher project authority for application in planning strategic direction changes and business outcomes for future projects |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
|---|---|
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| ***Cost estimation* may take account of:** | • the stage in each project's life cycles |
| | • the availability of information at the time |
| | • contingencies to allow for identified risks and uncertainty |
| | • overhead and profit margin |
| | • government regulations, industry codes of practice and organisational influences |
| ***Cost management plans and activities* throughout program management may:** | • be done independently or by taking the lead in a team environment |
| | • involve consultation with, and selective involvement of, appropriate project stakeholders |

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| | • involve the selection, modification and supervision of the use of appropriate cost management methods, processes, procedures, tools and techniques |
| | • be conducted non-routinely to meet complex and changing circumstances |
| | • take into account the impact of organisational and environmental change on the project/program and vice versa |
| *Management of project finances* **may include:** | • approval processes |
| | • financial authorisations/delegations |
| | • invoice procedures |
| | • audit and review |
| | • communication, reports and briefs |
| **Development of** *cost management systems* **may involve:** | • the application of personal judgement |
| | • the modification of program methodologies and procedures |
| | • cost modelling and estimating |
| | • financial analysis, for example benefit-cost analysis, cash flow analysis, earned value analysis |
| | • program obligation and expenditure forecasting and long-term planning |
| | • authorising and revising financial delegations |
| | • progress and financial change management |
| *Finalisation activities* **may include:** | • comparison of one project's cost management outcomes with success rates of other projects and with overall (organisation) budgetary expectations |
| | • direction of project team managers in their: |
| |    - transition of responsibility/ownership of project deliverables/products |
| |    - transfer of assets to the client or originating owner |
| |    - warranty requirements resolution |
| |    - final audit/reconciliation |
| |    - settling of financial liabilities |
| |    - close-out of account codes and other financial documentation |
| *Records* **may take the form of:** | • records of potential and actual costs |
| | • financial summaries |
| | • budgets, commitment and expenditure |
| | • cost management plans |
| | • reports to a higher authority |
| | • financial charts and graphs |
| | • program and/or organisation files and records |

- cost management lessons learned

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility across multiple projects or a program for direction of cost management of the inherent projects and for management of the program budget. This will include evidence of managing the work of project managers and those working within the projects' delivery environment.

## Specific Evidence Requirements

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| **Required knowledge and understanding include:** | • a detailed knowledge and understanding of: |
| |    - the principles of program project cost management and its application |
| |    - organisational policies, guidance and attitudes to cost management |
| |    - the relationship of cost, time and resources to the project management framework |
| |    - delegation and management of responsibilities for cost management |
| |    - direction of project development and management of program budgets |
| |    - use of the budget as a control mechanism |
| |    - appropriate cost management and estimating methodologies, techniques and tools, their capabilities and limitations, applicability and outcomes |
| |    - the differences in work content, risk, processes, tools and techniques that apply in the various phases of the recurring project life cycles within a volatile program environment |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities |
| | • program management |
| | • financial management |
| | • high level leadership and personnel management |
| | • analytical skills |
| | • communication skills |
| | • planning and organising |
| | • maintaining an overview of projects/programs |

- delegation
- attributes:
  - communicative
  - positive leadership

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
|---|---|
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
| | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to manage teams, including negotiating and developing reports<br><br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (3) | • tracking and monitoring major cost milestones of projects<br><br>• applying relevant skills associated with reviewing projects |
| Planning and organising activities (3) | • planning own work and that of project managers |
| Working in a team (3) | • managing the projects delivery environment including being the interface between the business and the requirements of project team managers and their teams<br><br>• working with others including external parties/clients |
| Using mathematical ideas and techniques (2) | • using calculation skills associated with data manipulation involved in the program, including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems and conflicting requirements arising in managing the program<br><br>• assisting others to solve problems arising within projects |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of program activities, financial reporting and data collation<br><br>• using specific program management software tools<br><br>• using assistive technology, if required |

|  |  |
|---|---|
| Innovation skills (2) | • using review process to inform future activity in project management |
| **Products that could be used as evidence include:** | • documentation produced in managing program/directing projects such as:<br>  - application of lessons learned from previous project(s) when authorising new projects entering the program<br>  - cost estimates at cost element and summary levels<br>  - cost management plans, strategies, analysis, forecasts and predictions<br>  - cost breakdown structures<br>  - financial feasibility studies<br>  - consolidated program budgets and expenditure forecasts<br>  - program cashflow profiles<br>  - records of analysis of financial variance and trends, and remedial actions taken<br>  - financial transition plans<br>  - budget control mechanisms<br>  - records of direction to project managers for clearance of project liabilities and disposal of project assets<br>  - aggregated project finalisation reports with program conclusions and recommendations<br>  - records of cost management lessons learned<br>  - financial audit documentation |
| **Processes that could be used as evidence include:** | • how resource requirements and associated costs were rationalised/levelled for the program<br>• how program budgets, cost strategies and cost management plans were updated, rationalised and reported<br>• how project managers were directed throughout projects with respect to the costs of projects<br>• how problems and issues with respect to costs arising during projects have been resolved<br>• how projects finalisation was reviewed for program update and reporting<br>• how projects have been reviewed with respect to cost management success criteria<br>• how improvements to cost management of projects have been used in future projects within the program |
| **Resource implications for assessment include:** | • access to workplace documentation |

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| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • examples of where the candidate has managed costs across multiple projects/programs |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at an Advanced Diploma qualification, as applicable to the candidate's management role in projects/programs |

# BSBPM605A Direct quality management of multiple projects/programs

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| **Unit Descriptor** | This unit specifies the outcomes required to direct quality management across multiple projects and within the overall program. It covers directing the development of quality requirements, directing quality assurance management and reviewing and improving the quality of projects and the program. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A *program* is defined as a set of interrelated projects, each of which has a project manager. *Multiple projects* (sometimes referred to as a portfolio of projects) means a number of projects which may or may not be related but which are all managed by the same person as a program to achieve a common organisational objective(s). |
| | For the purposes of this unit both types will be refered to as a program and managers as program managers. |
| | The functions performed by a project manager to manage quality within individual projects are addressed in BSBPM505A Manage project quality. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Direct quality requirements development** | 1.1 Reviews and consultation are directed to ensure that the organisation's quality objectives, standards, levels and criteria are applied at the project level in consultation with stakeholders |
| | 1.2 *Quality management* methods, techniques and tools are modified to the requirements of the program, as necessary, and directed for project team use |
| | 1.3 Program quality criteria are identified and communicated to project managers for implementation |
| | 1.4 Project managers are directed to develop and implement quality plans that will be used as the basis for performance measurement |
| **2. Direct project quality assurance management** | 2.1 Results of project activities and product performance are analysed to determine compliance with agreed quality standards throughout the project life cycles within the program |

| | 2.2 | Causes of unsatisfactory results are identified in consultation with project managers, and through clients and stakeholders, and appropriate actions are initiated to enable continuous improvement in quality outcomes |
|---|---|---|
| | 2.3 | Inspections of quality processes are directed and results are analysed to determine compliance with quality standards set for the overall program and the organisation |
| | 2.4 | A *quality management system* is developed and maintained to enable effective management and communication of quality issues and outcomes |
| **3. Improve program and projects' quality** | 3.1 | The quality management system is reviewed and modified continually throughout project activities to ensure project team commitment to continuous improvement of quality processes and outcomes |
| | 3.2 | Project outcomes review and analysis against performance criteria are directed to determine the effectiveness of the quality management system |
| | 3.3 | *Quality improvements* and lessons learned are aggregated and used to benefit the business and later program initiatives/projects and, where appropriate, are passed to organisational management for consideration in support of strategic planning and (re)direction |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
|---|---|
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| *Quality management* **may:** | be done independently or by taking the lead in a team environment |
| | • involve consultation with and direction to project managers regarding their selective involvement of appropriate project stakeholders |

|  | • involve the overall direction to project managers for the selection, modification and supervision of the use of appropriate quality management methods, processes, procedures, tools and techniques |
|  | • be conducted non-routinely to meet complex and changing circumstances |
|  | • take into account the impact of organisational and environmental change on the program and vice versa |
| A *quality management system* may include: | • ISO 9000 Series or as designed to meet the specific needs of the project |
| *Quality improvement* may include: | • formal practices, such as total quality management or continuous improvement |
|  | • less formal processes which improve both the product quality and processes of the project, for example client surveys to determine client satisfaction with projects performance |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility across multiple projects or a program for quality management of the projects. This will include evidence of managing the work of project managers and those working within the project teams.

### Specific Evidence Requirements

| Required knowledge and understanding include: | • a detailed knowledge and understanding of: |
|  | - the principles of project quality management and their application, and its relation to the organisation's quality management system |
|  | - the need for quality management in the project and its place in the overall organisation |
|  | - the importance of quality in trade-offs with scope, time and cost |
|  | - quality policies and standards applicable in the projects management environment |
|  | - quality management tools, including their capabilities, limitations, applicability and outcomes |
|  | - what are quality outcomes, critical success and failure criteria and quality performance measures |

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| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities<br>• project management, including delegation skills<br>• quality management<br>• client relationship management and client focus<br>• high level leadership and personnel management<br>• analytical skills<br>• communication skills<br>• planning and organising skills<br>• maintaining an overview of projects/programs<br>• attributes:<br>• communicative<br>• attention to detail/thoroughness<br>• positive leadership |
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:<br><br>Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks<br><br>The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to manage complex environments, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (3) | • tracking and monitoring multiple projects<br>• collating key projects' information for program tracking and reporting<br>• applying relevant skills associated with reviewing projects outcomes |
| Planning and organising activities (3) | • planning own work and that of project managers, and the output of a wide range of stakeholders related to the program |
| Working in a team (3) | • managing the projects delivery environment<br>• working with others including external parties/clients and project managers |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in the program, including financial data |

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| Solving problems (3) | • applying problem-solving skills as required to address problems and conflicting requirements arising in managing the program<br><br>• assisting others to solve issues within projects |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of program activities, financial reporting and data collation<br><br>• using specific program management software tools |
| Innovation skills (2) | • using review process to inform future activity in program management |

**Products that could be used as evidence include:**

- documentation produced in managing a program such as:
  - lists of program quality stakeholders and quality objectives
  - records of project selection and prioritisation processes and use of quality tools
  - alignment 'threads' between the quality management system and procedures documentation applied in projects
  - benefits quantification criteria and tracking documentation
  - stakeholder expectations lists, and means of review across the program
  - quality management plans
  - records of direction for inspections, modifications and quality outcomes
  - records of selection, management and direction for project teams' modifications of quality management system
  - quality control, quality assurance and continuous improvement processes
  - documentation of quality management lessons learned
  - relation of project quality outcomes to the continuous improvement objectives of the program and the organisation

**Processes that could be used as evidence include:**

- how quality requirements and outcomes were determined for projects and the program overall
- how quality tools were selected for use in projects
- how project managers were directed throughout the program with respect to their management of quality within projects
- how quality was managed throughout projects

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|  | • how quality-related problems and issues that are beyond the delegated authority of the project managers were processed, supported and resolved |
|  | • how projects were directed for review with respect to quality management |
|  | • how improvements to quality management of the program and projects have been used in future projects within the program |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
|  | • examples of where the candidate has managed quality across projects/programs |
| **Integrated competency assessment means:** | • this unit should be assessed with other project management units at an Advanced Diploma qualification, as applicable to the candidate's management role in projects/programs |

## BSBPM606A Direct human resources management of multiple projects/programs

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| **Unit Descriptor** | This unit specifies the outcomes required to direct human resource organisation and staffing within multiple projects and across the program, to direct project managers in relation to staff performance, and to provide leadership within the program. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A *program* is defined as a set of interrelated projects, each of which has a project manager. *Multiple projects* (sometimes referred to as a portfolio of projects) means a number of projects which may or may not be related but which are all managed by the same person as a program to achieve a common organisational objective(s). |
| | For the purposes of this unit both types will be refered to as a program and managers as program managers. |
| | The functions performed by a project manager to manage human resources within individual projects are addressed in BSBPM506A Manage project human resources. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Direct human resources management and responsibility assignment** | 1.1 Human resource requirement analysis for projects is directed, to determine numbers and skills levels required for the overall program |
| | 1.2 Stakeholder assessment is directed to establish a basis for stakeholder management within projects and the overall program |
| | 1.3 Responsibility assignment is directed for projects' activities and tasks and authorisation protocols are established |
| **2. Manage program organisation and staffing** | 2.1 Resource requirements for projects are determined, in consultation with project managers and appropriate stakeholders, to establish program staffing levels, allocation to projects and required competencies |
| | 2.2 *Project organisation and structure* is directed for development to optimise alignment of individual and group competencies within projects |

| | 2.3 | *Staff* are recruited, allocated to projects or reallocated within the organisation, within agreed delegated authority, to meet competency requirements throughout the program |
|---|---|---|
| | 2.4 | *Human resources management (HRM) methods, techniques and tools* are directed to project managers, and modified for program requirements |
| | 2.5 | Organisational HRM system and HRM processes are utilised across projects |
| **3. Direct project staff performance management** | 3.1 | Performance measurement criteria are agreed for clarity of roles and responsibilities and ongoing assessment |
| | 3.2 | Systems for ongoing *development and training* of personnel across the program are established and implemented by project managers |
| | 3.3 | Individuals' performance is measured against agreed criteria and actions are authorised to overcome shortfalls in performance and encourage career progression |
| **4. Lead teams** | 4.1 | A system of continuous improvement of staff is managed to enhance program effectiveness |
| | 4.2 | Individual and team performance and morale levels are analysed and action is taken where necessary |
| | 4.3 | Procedures for interpersonal communication, counselling and conflict resolution are directed to project managers and results are reviewed to maintain and promote a positive working environment |
| | 4.4 | Intra-organisational and intra-project conflict is identified and positively managed to maximise achievement of program objectives |
| | 4.5 | HRM lessons learned are aggregated for application in planning and later projects in the program and, where appropriate, passed to others for consideration in strategic planning and direction |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| *Project organisation and structure* **may be affected by external influences such as:** | • legislation, including anti-discrimination, equal employment opportunity, affirmative action and OHS<br>• workplace bargaining<br>• accepted work practices |
| *Staff* **may come from:** | • within the  uthorizing , such as staff on loan from other programs/projects<br>• external to the  uthorizing , such as consultants, collaborative or alliance agencies and external authorities |
| *Human resources management methods, techniques and tools* **may include:** | • individual and group competency identification and development<br>• HRM forecasts, staffing plans and job descriptions<br>• staff recruitment and reallocation<br>• performance monitoring, assessment and reporting<br>• conflict resolution |
| *HRM development and training* **may be formal or informal, and may include:** | • project management<br>• general management<br>• project administration, for example computer applications, filing systems<br>• specialist/professional skills and career progression<br>• interpersonal communications<br>• team building and group activities |

## Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

### Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility across multiple projects or a program for human resources management of the projects. This will include evidence of managing the work of others including project managers and those external to the program and/or  uthorizing  who contribute to, or benefit from, the outcomes of the projects.

**Specific Evidence Requirements**

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|---|---|
| **Required knowledge and understanding include:** | • a detailed knowledge and understanding of:<br> - the importance of human resources management in the project management environment<br> - policies, standards and methods required to achieve HRM outcomes<br> - the use of HRM selection, assignment, training, performance evaluation and motivation tools, including their capabilities, limitations, applicability and outcomes<br> - the conflict and stress issues associated with individuals managing projects especially within a human resource matrix management environment<br> - HRM outcomes, critical success and failure criteria and HRM performance measures<br> - the application of interpersonal skills<br> - assessment of interpersonal strengths and weaknesses<br> - application of relevant strategies, for example leadership, decision making, group dynamics, change management, learning/coaching<br> - the differences in work content, processes and risk that affect HRM requirements in the various phases of the project life cycle |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities<br><br>• program and project management<br><br>• human resources management<br><br>• high level management and leadership<br><br>• analytical skills<br><br>• communication skills<br><br>• planning and organising<br><br>• maintaining an overview of projects/programs<br><br>• delegation<br><br>• attributes:<br> - communicative<br> - positive leadership |

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| --- | --- |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
| | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to manage teams, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (3) | • tracking and monitoring key milestones of multiple projects<br>• applying relevant skills associated with reviewing outcomes of multiple projects |
| Planning and organising activities (3) | • planning own work and that of project managers |
| Working in a team (3) | • managing the program delivery environment<br>• working with others, including external parties/clients and project managers |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in the program, including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems and conflicting requirements arising across the program<br>•  uthorizing issues resolution arising within projects |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of project activities, financial reporting and data collation<br>• using specific program management software tools<br>• using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in program management |

| **Products that could be used as evidence include:** | • documentation produced in managing the program such as: |
|---|---|
| |   - current and future requirements for competency within the program |
| |   - staffing levels and competencies related to projects |
| |   - job descriptions, including measures of performance |
| |   - program organisation charts |
| |   - staff recruitment and selection criteria |
| |   - teams and individual responsibilities, levels of authority and performance assessment criteria |
| |   - high-level program responsibility assignment matrix |
| |   - master stakeholder management plan |
| |   - HRM system, including performance measurement and reporting, and conflict resolutions procedures |
| |   - HRM plans, including training and development plans |
| |   - records of analysis of internal and external influences on HRM performance |
| |   - HRM lessons learned |
| **Processes that could be used as evidence include:** | • how human resources requirements were authorised for projects |
| | • how required human resources were allocated to and/or selected for projects |
| | • how project managers were managed throughout the program with respect to human resources management |
| | • how responsibility assignment was directed, managed, and authorised |
| | • how human resources management was directed throughout the program including required training and development |
| | • how stakeholders were managed and their expectations tracked and met |
| | • how problems and issues with respect to human resources arising during projects were communicated to the program level and resolved |
| | • how projects outcomes were reviewed with respect to human resources management |
| | • how improvements to project human resources management have been/will be used in future projects within the program |

| | |
|---|---|
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • examples of where the candidate has directed human resources management across projects |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at an Advanced Diploma qualification, as applicable to the candidate's management role in projects/programs |

# BSBPM607A Direct communications management of multiple projects/programs

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|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to provide the critical link between people, ideas and information at all stages in the life-cycles of multiple projects across a program. |
| | It covers directing project communications and information management, managing program communications and analysing communications management outcomes for projects and programs. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A *program* is defined as a set of interrelated projects, each of which has a project manager. *Multiple projects* (sometimes referred to as a portfolio of projects) means a number of projects which may or may not be related but which are all managed by the same person as a program to achieve a common organisational objective(s). |
| | For the purposes of this unit both types will be refered to as a program and managers as program managers. |
| | The functions performed by a project manager to manage communications within individual projects are addressed in BSBPM507A Manage project communications. |

| **Element** | **Performance Criteria** |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Direct planning of project communications** | 1.1 Project information requirements are directed for identification, documentation and analysis, in consultation with appropriate stakeholders, as the basis for projects and program communications planning |
| | 1.2 *Communications management plans and activities* are directed for development and management to ensure clarity of understanding and achievement of multiple project objectives at all levels (organisation, operations, program and projects) |
| | 1.3 *Project management information system*, structure and procedures are developed to maintain the quality, validity, timeliness and integrity of information and communication across the program and in regard to organisational (strategic) management |

| | | |
|---|---|---|
| **2. Direct management of project information** | 2.1 | The generation, gathering, storage, retrieval, analysis and dissemination of information by project staff and stakeholders is directed to improve decision making processes and the communications throughout the program and between the projects |
| | 2.2 | *Information validation* processes are directed for development, management and modification to ensure consistent quality and accuracy of data across the program |
| **3. Manage program communications** | 3.1 | Formal and informal communication networks between the organisation's management structure, program, projects and key stakeholders are developed and managed to ensure effectiveness throughout the multiple life cycles of projects within the program |
| | 3.2 | Potential, perceived and actual problems with communication and management information systems are addressed through project managers, and remedial actions are authorised to ensure project, program, and organisations objectives are met |
| | 3.3 | Customer relationships beyond the delegated responsibility of project managers are managed to ensure clarity of understanding of objectives and to minimise conflict throughout the program |
| **4. Analyse communications management outcomes** | 4.1 | Project finalisation activities are directed to ensure ownership of, and responsibility for, information outcomes |
| | 4.2 | Project outcomes are reviewed and analysed to determine the effectiveness of management information and communications systems |
| | 4.3 | Lessons learned across multiple projects are aggregated and used for other applications in the program and the organisation |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| *Communications management plans and activities* **by a program manager may:** | • be done independently or by taking the lead in a multiple teams environment<br>• involve consultation with project managers and selective involvement of appropriate project stakeholders<br>• involve the selection, modification and supervision of appropriate communications management methods, processes, procedures and tools<br>• be conducted non-routinely to meet complex, changing circumstances<br>• take into account the impact of organisational and environmental change on the program and vice versa |
| *The project management information system (PMIS)* **may include:** | • networks structure, processes and procedures for storage and communication of information<br>• individual and group authority and responsibilities<br>• hierarchy of decision making responsibility/authority<br>• limitations and restrictions on subject matter and methods of communication<br>• types, responsibilities, distribution and regularity of reports, as well as follow-up procedures |
| *Information validation processes* **may be influenced by the:** | • age of the information<br>• level of detail of information (too much or too little)<br>• language (translated or converted data may need special attention)<br>• changes to standards, regulations or limits since information was compiled<br>• degree of exposure to mis-information and dis-information<br>• potential impact of the information on the program outcome<br>• cost of the validation process |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility across multiple projects or a program for communications management of the projects. This will include evidence of managing others' work including project managers and a range of stakeholders within, and external to, the organisation.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | • a detailed knowledge and understanding of:<br><br>  - the principles of communications management and their application<br><br>  - the importance of communications at all levels and at all times within the program, the organisation and the external environment<br><br>  - the establishment and maintenance of structured communication networks in a rapidly evolving technological environment involving computer-based, interpersonal and media-based methods of communication<br><br>  - appropriate communication management technologies; their capabilities, limitations and applicability<br><br>  - the contribution of communications to program and organisational outcomes<br><br>  - aggregating, commenting on, endorsing and forwarding reports to organisational management<br><br>  - feedback to multiple project teams |
| **Required skills and attributes include:** | • ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities<br><br>• program management and delegation skills<br><br>• high level leadership and personnel management<br><br>• analytical skills<br><br>• communication skills<br><br>• planning and organising<br><br>• maintaining an overview of projects/programs<br><br>• attributes: communication and positive leadership |

| | |
|---|---|
| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
| | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to manage a complex projects delivery environment, including negotiating, developing reports and conducting meetings |
| | • communicating verbally, including making presentations, chairing steering group meetings and questioning and discussing |
| Collecting, analysing and organising information (3) | • tracking and monitoring major outcomes and interdependencies of multiple projects |
| | • applying relevant skills associated with reviewing projects' outcomes |
| Planning and organising activities (3) | • planning own work and that of project managers |
| Working in a team (3) | • managing the projects delivery/program environment |
| | • working with others including external parties/clients and project managers |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in projects, including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems and conflicting requirements arising in managing the program |
| | • assisting others to solve problems arising within the program |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of program activities, financial reporting and data collation |
| | • using specific program management software tools |
| | • using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in program management |
| **Products that could be used as** | • documentation produced in managing program such as: |

**evidence include:**

- communications management plans and strategies
- project management information system
- progress reports upwards and downwards within the program and organisation
- records of meetings, outcomes and actions
- formal briefs, presentations, media releases and newsletters
- records of collection, validation, storage, retrieval, analysis and/or dissemination of information
- validation processes and post-validation modifications
- formal and informal communication networks
- records of communications problems, analysis and solutions
- records of communications management lessons learned

**Processes that could be used as evidence include:**

- how information requirements were determined for the program of projects
- how communication plans and associated processes were directed for development for projects
- how project team managers were managed throughout projects with respect to communications
- how information was managed across multiple projects within the program
- how project reporting processes were managed for multiple projects' outcomes across the program
- how communications problems and issues arising during projects were addressed
- how communications within the program were reviewed at finalisation
- how improvements to communications management of projects have been used in future projects entering the program

**Resource implications for assessment include:**

- access to workplace documentation

**Validity and sufficiency of evidence requires:**

- that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment
- examples of where the candidate has managed communications across projects

**Integrated competency assessment means:**

- that this unit should be assessed with other project management units at an Advanced Diploma qualification, as applicable to the candidate's management role in projects/programs

# BSBPM608A Direct risk management of multiple projects/programs

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|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to manage the factors that might adversely affect multiple projects, the program and organisational outcomes. It covers directing the planning and management of project risks, managing risks to the overall program, and assessing risk management outcomes for the program and the organisation. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A *program* is defined as a set of interrelated projects, each of which has a project manager. *Multiple projects* (sometimes referred to as a portfolio of projects) means a number of projects which may or may not be related but which are all managed by the same person as a program to achieve a common organisational objective(s). |
| | For the purposes of this unit both types will be refered to as a program and managers as program managers. |
| | The functions performed by a project manager to manage risk within individual projects are addressed in BSBPM508A Manage project risk. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Direct planning of project risk management** | 1.1 Potential, perceived and actual risk events are directed for identification, documentation and analysis, in consultation with project managers and appropriate stakeholders, as the basis for project *risk management planning* |
| | 1.2 Project *risk management methods, techniques and tools* are selected and modified for project managers to analyse information, evaluate options and determine preferred risk approaches within the overall program environment |
| | 1.3 Project *risk management plans* and strategies are directed for development, communication and implementing to ensure clarity of understanding and achievement of project objectives throughout the program |

| | | |
|---|---|---|
| | 1.4 | A project risk management system is developed and maintained to enable effective management and communication of risk events, responses and results to stakeholders across projects within the program |
| **2. Direct management of project risk and manage program risk** | 2.1 | The program is managed in accordance with agreed project risk management plans |
| | 2.2 | Progress is reviewed, variance is analysed and risk responses are initiated to achieve program and multiple project objectives in changing environments |
| | 2.3 | Risks to multiple project outcomes are directed for monitoring, and remedial actions are authorised to achieve project objectives |
| **3. Assess project and program risk management outcomes** | 3.1 | Project outcomes are reviewed and analysed to assess the effectiveness of the project risk management system for multiple projects, program and organisational outcomes |
| | 3.2 | Lessons learned are aggregated, analysed and structured for feedback to project managers and senior management for strategic review and planning |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| *Risk management planning* **may:** | • be done independently or by taking the lead in a multiple projects team environment |
| | • involve consultation with project managers and with selective involvement of stakeholders within and external to the organisation |
| | • involve the selection, modification and direction of the use of appropriate risk management methods processes, procedures, tools and techniques |

|  |  |
|---|---|
| ***Risk management methods, techniques and tools* may involve:** | • be conducted substantially non-routinely to meet complex and changing circumstances |
| | • take into account the impact of organisational and environmental change on the program and vice versa |
| | • calling upon personal experience and/or subject matter experts |
| | • conducting or directing qualitative and/or quantitative risk analysis, such as schedule simulation, decision analysis, contingency planning and alternative strategy development |
| | • collating and using the products of specialist risk analysis to make program-wide risk management decisions |
| | • assessing and reporting the potential impact of multiple projects risk on the organisation |
| ***Risk management plans* may include:** | • potential risk events |
| | • preferred and alternative risk management strategies and actions |
| | • OHS risks |
| | • formal arrangements |
| | • responsibility assignment |
| | • contingency plans |
| | • assigned risk responsibilities |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility for risk management across multiple projects or a program. This will include evidence of managing the work of others including project managers and a range of stakeholders and contributing agencies both within and beyond the organisation.

## Specific Evidence Requirements

| **Required knowledge and understanding include:** | • a detailed knowledge and understanding of: |
|---|---|
| | - uncertainty and the means of its measurement |
| | - organisational policies, guidance and attitudes to risk management |
| | - personal attitudes to uncertainty and risk, and how they might impact on the program's and organisation's approach to risk management |

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- the place of project risk management in the context of the project life cycle and other project management functions
- appropriate project risk management methodologies, their capabilities, limitations, applicability and outcomes
- the differences in work content, risk, processes, tools and techniques that apply in the various phases of the project life cycle and of the program cycle and how these relate to business cycles, particularly financial

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**Required skills and attributes include:**

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• ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities

• program management

• project risk management

• high-level leadership and personnel management

• analytical skills

• communication skills

• planning and organising

• maintaining an overview of projects/programs

• delegation

• attributes:
  - communicative
  - positive leadership

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**Key competencies or generic skills relevant to this unit**

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The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit:

Level (1) represents the competence to undertake tasks effectively
Level (2) represents the competence to manage tasks
Level (3) represents the competence to use concepts for evaluating and reshaping tasks

The bulleted points provide examples of how the key competencies can be applied for this unit

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Communicating ideas and information (3)

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• communicating to manage teams, including negotiating and developing reports

• communicating verbally, including making presentations, and participating in meetings, questioning and discussions

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| | |
|---|---|
| Collecting, analysing and organising information (3) | • tracking and monitoring multiple projects across the program<br>• applying relevant skills associated with reviewing projects in a program and a program-to-organisation context |
| Planning and organising activities (3) | • planning own work and that of project managers and a range of stakeholders both within and external to the organisation |
| Working in a team (3) | • managing multiple project teams in a projects delivery (program) environment<br>• working with others, including external parties/clients and project managers |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation and interpretation involved in the program including quantitative risk (statistical) analysis |
| Solving problems (3) | • applying problem-solving skills as required to address problems and conflicting requirements arising in managing the program, particularly resolving cost of treatment versus consequence of failure equations for individual projects<br>• assisting others to solve problems arising within the program |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of program activities, financial reporting and data collation<br>• using specific program management software tools |
| Innovation skills (2) | • using review process to inform future activity in program management |
| **Products that could be used as evidence include:** | • documentation produced in managing program/projects such as:<br>  - collated lists of potential risk events<br>  - records of identification and prioritisation of multiple project risk events<br>  - detailed records of project risk analysis, forecasts and predictions, and reappraisal<br>  - program risk management plans<br>  - details of development of, and direction to use, project risk management system<br>  - details of modifications to project risk management system, plans and procedures<br>  - documentation of formal risk management arrangements, for example contracts |

| | |
|---|---|
| | - records of project risk management lessons learned and application in other projects |
| | - program risk management lessons learned |
| **Processes that could be used as evidence include:** | • how multiple project risks were identified and documented for projects |
| | • how project risk management plans were developed |
| | • how project managers were managed throughout projects with respect to project risk management across the program |
| | • how program risks were managed |
| | • how problems and issues with respect to project and program risk were resolved |
| | • how projects were reviewed with respect to risk management for impact on the program and the organisation |
| | • how improvements to project risk management have been used in future projects |
| **Resource implications for assessment include:** | • access to workplace documentation |
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • examples of where the candidate has managed risk across projects/programs |
| **Integrated competency assessment means:** | • that this unit should be assessed with other project management units at an Advanced Diploma qualification, as applicable to the candidate's management role in projects/programs |

# BSBPM609A Direct procurement and contracts of multiple projects/programs

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|---|---|
| **Unit Descriptor** | This unit specifies the outcomes required to direct the management of contracting activities across projects and programs. It covers setting up the contracting process, directing the management of contract and procurement processes, and finalising contracts for projects across the program. |
| **Competency Field** | Business management services |
| **Domain** | Project management |
| **Application of the Competency** | A *program* is defined as a set of interrelated projects, each of which has a project manager. *Multiple projects* (sometimes referred to as a portfolio of projects) means a number of projects which may or may not be related but which are all managed by the same person as a program to achieve a common organisational objective(s). |
| | For the purposes of this unit both types will be refered to as a program and managers as program managers. |
| | The functions performed by a project manager to manage procurement within individual projects are addressed in BSBPM509A Manage project procurement. |
| | It should be noted that conflicting priorities between projects are managed with higher project authority support, in this case project governance committees or senior management. |

| Element | Performance Criteria |
|---|---|
| Elements define the critical outcomes of a unit of competency. | The Performance Criteria specify the level of performance required to demonstrate achievement of the Element. *Italicised* terms are elaborated in the Range Statement. |
| **1. Direct planning for project contracting and procurement** | 1.1 Product specifications and procurement requirements are directed for identification, analysis and prioritisation, in consultation with appropriate stakeholders, for procurement and contract planning |
| | 1.2 *Procurement strategies, methods and management plans* are directed for development for project objectives throughout the program |
| **2. Direct set up of contract and procurement process** | 2.1 Project managers are directed to source organisations that meet procurement requirements |
| | 2.2 Selection processes and selection criteria are established, in consultation with stakeholders, and communicated to prospective contractors |

| | 2.3 | Contract and procurement actions accord with organisation and program objectives |
|---|---|---|
| **3. Direct management of contract and procurement process** | 3.1 | Direction is provided for requirements of *proposals*, and communicated to prospective contractors |
| | 3.2 | Direction is provided for responses to be evaluated and preferred contractors to be selected in accordance with agreed selection processes |
| | 3.3 | Contract terms and conditions are directed for negotiation between client and preferred contractor |
| **4. Direct management of contracts** | 4.1 | Contract and procurement activities are directed for management in accordance with program contract and procurement management guidelines |
| | 4.2 | Direction is provided for regular reviews from available *records* and information, and variance is directed for analysis and changes are agreed for implementation |
| | 4.3 | Project managers are directed to work within the legal and organisational framework for contracts |
| | 4.4 | Potential, perceived and actual contractual conflicts are directed for identification and remedial actions are approved to minimise disruption |
| **5. Direct finalisation of contracts** | 5.1 | Finalisation activities are directed for management of contract deliverables in accordance with contractual and project and program requirements |
| | 5.2 | Project outcomes are directed for review and analysis to determine the effectiveness of contract and procurement processes and procedures |
| | 5.3 | Lessons learned are aggregated and used for application in planning and implementation of later projects within the program and, where appropriate, passed to organisational management for use in strategic planning |

## Range Statement

The Range Statement adds definition to the unit by elaborating critical or significant aspects of the performance requirements of the unit. The Range Statement establishes the range of indicative meanings or applications of these requirements in different operating contexts and conditions. The specific aspects which require elaboration are identified by the use of italics in the Performance Criteria.

| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• relevant legislation from all levels of government that affects business operation, especially in regard to OHS and environmental issues, equal opportunity, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
|---|---|
| ***Procurement strategies, methods and management plans* may include:** | • contract performance plans and an associated performance monitoring processes<br>• contractor and sub-contractor responsibilities, controls and reporting relationships<br>• procurement, test and acceptance procedures and payment schedules<br>• conflict resolution processes<br>• explanatory information (for example background, restrictions or expectations) relating to special terms and conditions planning for long lead-time items and critical program components, and transition plans |
| ***Proposals* may take the form of:** | • tenders<br>• submissions<br>• quotations<br>• expressions of interest |
| ***Records* may take the form of:** | • product specifications<br>• procurement management plans<br>• contract analysis, evaluation of options and strategy development<br>• contractor identification, evaluation and selection records<br>• contract negotiation documentation, for example contract negotiation strategies, plans, team and individual directives<br>• progress measurement and conflict resolution process records<br>• development and management of contract change procedures<br>• test and acceptance procedures<br>• contract discharge procedures and outcomes<br>• procurement management lessons learned |

# Evidence Guide

The Evidence Guide provides advice to inform and support appropriate assessment of this unit. It contains an overview of the assessment requirements followed by identification of specific aspects of evidence that will need to be addressed in determining competence. The Evidence Guide is an integral part of the unit and should be read and interpreted in conjunction with the other components of competency.

Assessment must reflect the endorsed Assessment Guidelines of the parent Training Package.

## Overview of Assessment Requirements

A person who demonstrates competence in this unit must be able to provide evidence that they have taken responsibility across the multiple projects or a program for direction of contract and procurement management. This will include evidence of managing the work of others, including project managers.

## Specific Evidence Requirements

| | |
|---|---|
| **Required knowledge and understanding include:** | <ul><li>a detailed knowledge and understanding of:<ul><li>the principles of contract and procurement management and their application</li><li>the principles of contracts and contractual legal requirements from the project and program management perspective</li><li>contract types, their capabilities, limitations, applicability and outcomes</li><li>personal and team oriented contract negotiation skills</li><li>contract and procurement management processes and procedures</li></ul></li></ul> |
| **Required skills and attributes include:** | <ul><li>ability to relate to people from a range of social, cultural and ethnic backgrounds, and physical and mental abilities</li><li>project and program management</li><li>high-level leadership and personnel management</li><li>analytical skills</li><li>communication skills</li><li>planning and organising</li><li>maintaining an overview of projects/programs</li><li>delegation</li><li>attributes:<ul><li>communicative</li><li>thoroughness</li><li>positive leadership</li></ul></li></ul> |

| **Key competencies or generic skills relevant to this unit** | The seven key competencies represent generic skills considered essential for effective work participation. Innovation skills represent a further area of generic competence. The bracketed numbering indicates the performance level required in this unit: |
| --- | --- |
| | Level (1) represents the competence to undertake tasks effectively<br>Level (2) represents the competence to manage tasks<br>Level (3) represents the competence to use concepts for evaluating and reshaping tasks |
| | The bulleted points provide examples of how the key competencies can be applied for this unit |
| Communicating ideas and information (3) | • communicating to manage teams, including negotiating and developing reports<br>• communicating verbally, including making presentations, and participating in meetings, questioning and discussions |
| Collecting, analysing and organising information (3) | • tracking and monitoring major outcomes of projects and therefore the program against organisational objectives<br>• applying relevant skills associated with reviewing multiple projects and the program |
| Planning and organising activities (3) | • planning own work and that of project managers and stakeholders within/beyond the organisation |
| Working in a team (3) | • managing project teams in a projects delivery/program environment<br>• working with others including external parties/clients and project managers |
| Using mathematical ideas and techniques (1) | • using calculation skills associated with data manipulation involved in the program, including financial data |
| Solving problems (3) | • applying problem-solving skills as required to address problems and conflicting requirements arising in managing the program<br>• assisting others to solve problems arising within the program |
| Using technology (2) | • using word processing packages, spreadsheets, databases and other packages to produce written correspondence and reports of program activities, financial reporting and data collation<br>• using specific program management software tools<br>• using assistive technology, if required |
| Innovation skills (2) | • using review process to inform future activity in program management |

| | |
|---|---|
| **Products that could be used as evidence include:** | • documentation produced in directing the management of multiple projects and the program such as: |
| |   - records of product specifications |
| |   - aggregated/synthesised procurement management plans |
| |   - records of analysis, evaluation of options and procurement strategy development |
| |   - contractor identification, evaluation and selection records |
| |   - tendering documentation, evaluation criteria and selection processes |
| |   - contract negotiation documentation, for example contract negotiation strategies, plans and team and individual directives or working documents |
| |   - program impact records of project progress measurement and conflict resolution processes |
| |   - program records of development and management of multiple project contract change procedures |
| |   - program analysis of multiple project records of test and acceptance procedures |
| |   - program records of contract discharge procedures and documentation |
| |   - program records of procurement management lessons learned and application in other projects |
| **Processes that could be used as evidence include:** | • how procurement requirements were directed for identification and documentation for projects |
| | • how procurement management plans were authorised for projects |
| | • how project managers were managed throughout projects with respect to management of procurement within their projects |
| | • how procurement was managed during multiple projects across the program |
| | • how procurement problems and issues arising during multiple projects were addressed |
| | • how contract finalisation activities were directed for management |
| | • how contract and procurement management was reviewed in projects |
| | • how improvements to contract procurement management have been used for future projects within the program |
| **Resource implications for assessment include:** | • access to workplace documentation |

| | |
|---|---|
| **Validity and sufficiency of evidence requires:** | • that where assessment is part of a learning experience, evidence will need to be collected over a period of time, involving both formative and summative assessment |
| | • examples of where the candidate has managed procurements and contracts across projects/programs |
| **Integrated competency assessment means:** | • this unit should be assessed with other project management units at an Advanced Diploma qualification, as applicable to the candidate's management role in projects/programs |

# **B**SBSBM402A Undertake financial planning

| | |
|---|---|
| **Unit Descriptor** | This unit involves the development of a financial plan to support business viability. It is suitable for setting up or existing micro and small businesses or a department in a larger organisation. |
| | This unit is related to BSBSBM404A Undertake business planning |
| | |
| **Competency Field** | Business Management Services |

| Element | Performance Criteria |
|---|---|
| 1. Analyse the financial requirements of the business | 1.1 Income and outgoing expenditure is identified and assessed to plan for business viability |
| | 1.2 *Costs* associated with the production and delivery of the business' products/services are identified and documented |
| | 1.3 Appropriate *pricing strategies* are identified in relation to market conditions to meet the profit targets of the business |
| | 1.4 Contribution margins of products/services are considered to obtain the optimum sales mix |
| | 1.5 Profit projections are prepared to supplement the business plan |
| 2. Develop a financial plan | 2.1 *Profit targets/ goals* set to reflect owners desired returns |
| | 2.2 Working capital requirements necessary to attain profit projections are identified |
| | 2.3 Non-current asset requirements are identified and alternative asset management strategies considered |
| | 2.4 *Cash flow projections* are prepared to enable business operation in accordance with the business plan and legal requirements |
| | 2.5 Capital investment requirements are identified accurately for each operational period |
| | 2.6 Budget targets are selected to enable ongoing monitoring of financial performance |
| 3. Acquire finance | 3.1 Startup and ongoing financial requirements identified according to financial plan/budget |
| | 3.2 Sources of finance, including potential *financial backers*, to provide required liquidity for the business are identified to complement business goals and objectives |

| Element | Performance Criteria |
|---|---|

3.3 Cost of securing finance on optimal terms is investigated

3.4 Strategies to obtain finance are identified as required to ensure financial viability of the business

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• Federal, State/Territory and Local Government legislative requirements affecting business operation, especially in regard to OHS and environmental issues, EEO, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
|---|---|
| **Costs may include:** | • direct / indirect costs<br>• fixed, variable, semi-variable costs |
| **Pricing strategies may include:** | • cost/volume/profit analysis<br>• competitor analysis<br>• market conditions<br>• perceived value<br>• penetration pricing<br>• skimming<br>• discounting |
| **Pricing methods may include:** | • mark up on cost<br>• hourly chargeout rates<br>• unit cost of production |
| **Profit targets/goals may include:** | • desired return on investment<br>• desired actual/notional salary for owner/manager(s)<br>• sales turnover/ gross fees or income<br>• cost of goods/ services sold<br>• gross profit/ net profit<br>• breakeven point |

## Range Statement

| | |
|---|---|
| **Financial plan may include:** | • working in conjunction with external consultants e.g. investment analyst, accountant/s, financiers |
| | • the current financial state of the enterprise (or owner/operator) |
| | • financial performance to date (if applicable) |
| | • likely return on investment |
| | • a review of financial inputs required (sources and forms of finance) |
| | • projections of likely financial results (budgeting) |
| | • projected profit targets, pricing strategies, margins |
| | • profit, turnover, capital and equity targets |
| | • risks and measures to manage or minimise risks |
| | • working, fixed, debt and equity capital |
| | • non-recurrent assets calculations |
| | • projections may vary depending on the importance of such information and the stage in the life of the business |
| | • monthly, quarterly or annual returns |
| | • analysis of sales by product/service, identifying where they were sold and to whom |
| | • estimates of profit and loss projections for each forward period |
| | • cash flow estimates for each forward period |
| | • resources required to implement the proposed marketing and production strategies (staff, materials, plant and equipment) |
| **Cash flow projections may include:** | • customer credit policy / debt recovery |
| | • anticipated receipts |
| | • anticipated payments |
| | • taxation provisions |
| **Financial backers may include:** | • financiers/banks/lending institutions |
| | • shareholders/partners/owners |

# Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range of Variables.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Development of a financial plan which identifies the financial requirements of the business, including profit targets, cash flow projections and strategies for the acquisition of finance |
| **Underpinning Knowledge\*** <br><br> \* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts. | • Federal, State/Territory and Local Government legislative requirements affecting business operation, especially in regard to OHS and environmental issues, EEO, industrial relations and anti-discrimination <br>• Financial decision making relevant to the business <br>• Basic costing for the business, including margin/mark-up, hourly chargeout rates and unit costs <br>• Breakeven analysis <br>• Working capital cycles <br>• Methods and relative costs of obtaining finance <br>• Purpose of financial reports <br>• Relevant accounting terminology <br>• Basic accounting principles <br>• Principles of budgeting <br>• Principles for preparation of profit and loss statements <br>• Principles for preparation of balance sheets <br>• Principles for preparation of cash flow forecasts |
| **Underpinning Skills** | • Numeracy concepts to analyse financial information regarding the business <br>• Communication including reporting <br>• Ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |

# Evidence Guide

| | |
|---|---|
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range of Variables |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
| | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:  These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

• **Collecting, analysing and organising information** — to acquire and plan finances

• **Communicating ideas and information** — to obtain and convey financial information

• **Planning and organising activities** — to comply with legal requirements and plan finances

• **Working with teams and others** — to obtain finance and financial information

• **Using mathematical ideas and techniques** — to plan and maintain finances

• **Solving problems** — to maximise business financial viability

• **Using technology** — to optimise business performance

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

## BSBSBM403A Promote the business

| | |
|---|---|
| **Unit Descriptor** | This unit covers the development and implementation of marketing strategies and the monitoring and improvement of market performance. It is suitable for setting up or existing micro and small businesses or a department in a larger organisation. |
| | This unit is related to BSBSBM404A Undertake business planning. |
| **Competency Field** | Business Management Services |

| Element | Performance Criteria |
|---|---|
| 1. Develop marketing strategies | 1.1 The business and its key products or services are analysed to determine the focus of marketing activities in accordance with the objectives of the business plan |
| | 1.2 Customer base and target market for the business are evaluated as a basis for marketing strategies |
| | 1.3 *Marketing objectives* and strategies are determined in consultation with *relevant people* in accordance with the business plan |
| 2. Determine a *marketing mix* for the business | 2.1 Product mix, volumes and *pricing* are balanced to optimise sales and profit |
| | 2.2 The costs and benefits of using *different distribution channels* and/or providing different *levels of customer service* are evaluated and the results considered in determining the marketing mix |
| | 2.3 Promotional activities are determined to suit the target market |
| | 2.4 Customer needs and preferences are considered in determining the marketing mix |
| | 2.5 Marketing mix is determined according to market and business needs |
| 3. Implement marketing strategies | 3.1 Persons involved in the marketing effort are briefed on their roles and responsibilities to ensure the success of marketing strategies |
| | 3.2 *Promotional activities* are planned and implemented in accordance with marketing objectives and budgetary requirements |
| 4. Monitor and improve marketing performance | 4.1 Ongoing monitoring of marketing activities and evaluation of business performance is conducted according to the objectives and targets of the business plan |

| Element | Performance Criteria |
|---|---|
| | 4.2 *Performance gaps* analysed and corrective action taken or new targets set |
| | 4.3 All relevant people are encouraged to propose ways to improve marketing performance |
| | 4.4 *Customer reaction* to all aspects of the marketing mix is sought and analysed to improve targeting and outcomes |
| | 4.5 Ongoing research of customer requirements is conducted to identify *opportunities for* change and improvement |
| | 4.6 Changes in market opportunities are monitored and investigated for new business opportunities to aid business development |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br>• Federal, State/Territory and Local Government legislative requirements affecting business operation, especially in regard to OHS and environmental issues, EEO, industrial relations and anti-discrimination<br>• relevant industry codes of practice |
| **Marketing strategies may include:** | • product design and packaging<br>• pricing, presentation and display of products/services<br>• promotion and advertising<br>• product range and mix<br>• distribution<br>• achieving lower costs of production and distribution than competitors<br>• pursuing cost leadership and/or product differentiation within a specialist market segment<br>• creating a very different product line or service so that the business becomes a class leader in the industry |
| **Relevant people may include:** | • owner/operator, partners<br>• financial backers, clients |

## Range Statement

- accountant or other specialist services
- family members, work team members, sub-contractors
- franchise agency
- trade or industry associations
- regulatory bodies

| | |
|---|---|
| **Marketing mix may include:** | • technical features, design<br>• quality, range<br>• safety features<br>• pricing<br>• promotion, distribution<br>• level of service |
| **Distribution channels may include:** | • self-access, wholesale, retail<br>• distributor, delivery service, mail order, telesales<br>• dealer, re-seller, franchisee |
| **Level of customer service may include:** | • sales assistance for problems/queries only<br>• one-on-one personal service<br>• after sales service |
| **Promotional activities may include:** | • advertising in national suburban or local newspapers<br>• web site<br>• word of mouth, referral, testimonials<br>• professional/industry journals<br>• advertising on radio or television<br>• mail drops<br>• display posters<br>• canvassing and telephone canvassing<br>• exhibitions, in-store promotions<br>• sponsorship<br>• the development of networks and strategic alliances<br>• staff development programs to enhance customer service orientation |
| **Performance gaps may include:** | • under or over achievement of performance targets |
| **Customer reaction may be determined through:** | • survey/other feedback mechanisms<br>• informal discussion<br>• customer meetings, focus groups<br>• sales to contact ratio |

## Range Statement

- trend analysis
- identification of new business opportunities

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range of Variables.

| | |
|---|---|
| **Critical Aspects of Evidence** | • Ability to develop a marketing strategy and choice of marketing mix to complement the business plan<br><br>• Ability to implement and monitor the marketing strategy/plan to optimise the chances of business success |
| **Underpinning Knowledge\***<br><br>\* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts. | • Federal, State/Territory and Local Government legislative requirements affecting business operation, especially in regard to OHS and environmental issues, EEO, industrial relations and anti-discrimination<br><br>• relevant marketing concepts and methods<br><br>• relevant market analysis and research<br><br>• methods of developing marketing objectives and marketing mix<br><br>• methods of analysing costs and benefits of marketing strategies<br><br>• methods of monitoring customer satisfaction<br><br>• industry market trends |
| **Underpinning Skills** | • literacy and numeracy skills to research information and to interpret market data<br><br>• communication including questioning, clarifying, reporting<br><br>• numeracy skills for data analysis<br><br>• ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |
| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace |

# Evidence Guide

| | |
|---|---|
| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range of Variables |
| | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
| | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment Add in additional industry requirements if appropriate |
| | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB: These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 3 | Level 2 | Level 2 | Level 3 | Level 2 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information** — to develop marketing strategies
- **Communicating ideas and information** — to consult with relevant people
- **Planning and organising activities** — to implement to marketing strategy
- **Working with teams and others** — to gain support for the plan
- **Using mathematical ideas and techniques** — to research market needs
- **Solving problems** — to determine the optimum marketing mix
- **Using technology** — to optimise business performance

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

## BSBSBM404A Undertake business planning

| | |
|---|---|
| **Unit Descriptor** | This unit covers the research and development of an integrated business plan for achieving business goals and objectives. It is suitable for setting up or existing micro and small businesses or a department in a larger organisation. |
| | This unit is related to BSBSBM301 Research business opportunities. Consider co-assessment with BSBSBM401 Establish business and legal requirements, BSBSBM402 Undertake financial planning and BSBSBM403 Promote the business. |
| **Competency Field** | Business Management Services |

| **Element** | **Performance Criteria** |
|---|---|
| 1 Identify elements of a business plan | 1.1 Components of a business plan relevant to a *business opportunity* identified and reviewed |
| | 1.2 Purpose of the *business plan* is identified |
| | 1.3 *Business goals and objectives* are identified and documented, as a basis for measuring business performance |
| 2. Develop a business plan | 2.1 The *business plan* demonstrates research into customer needs, resources and legal requirements especially OHS, in accordance with business goals and objectives |
| | 2.2 The *financial plan* identifies sources and costs of finance to provide required liquidity and profitability for the business |
| | 2.3 *Marketing/promotion strategies* identify methods to promote the market exposure of the business |
| | 2.4 *Production/operations plan* identifies methods/means of production/operation to conform with business goals and objectives |
| | 2.5 *Staffing* requirements, are identified as required to effectively produce/deliver products/services |
| | 2.6 *Specialist services* and sources of advice are identified where required, and costed in accordance with resources available |
| 3. Develop strategies for minimising risks | 3.1 Specific interests and objectives of *relevant people* are identified and their support of the planned business direction is sought and confirmed |
| | 3.2 *Risk management strategies* are identified and developed according to business goals and objectives and relevant legal requirements |
| | 3.3 *Contingency plan* is developed to address possible areas of non conformance to plan |

# Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments<br><br>• Federal, State/Territory and Local Government legislative requirements affecting business operation, especially in regard to OHS and environmental issues, EEO, industrial relations and anti-discrimination<br><br>• relevant industry codes of practice |
| **OHS issues must include:** | • management of the organisation and operation of OHS as part of the business plan<br><br>• procedures for managing hazards in the workplace (identify, assess and control)<br><br>• identification of specific hazard issues such as occupational violence, security, manual handling, equipment and hazardous substances.<br><br>• provisions for ensuring safety of members of the public and contractors visiting the premises/worksite. |
| **Business plan may include:** | • proposed size and scale of the business<br><br>• market focus of the business<br><br>• marketing requirements<br><br>• sources of funding<br><br>• need to raise finance and requirements of lenders<br><br>• level of risk involved, risk assessment and management<br><br>• stages in the business development<br><br>• business opportunities<br><br>• resources required and available<br><br>• details of ownership/management<br><br>• staffing<br><br>• organisation/ operational arrangements<br><br>• specialist services and sources of advice which may be required<br><br>• finance, expenditure statement, balance sheet and cash flow forecast, projections for the initial years of operation assumptions underlying the business plan, |

# Range Statement

expected level of inflation and taxation, expected trend of interest rate, capital expenditure and its timing, stock turnover, debtors collection period, creditor payment period, return on investment

- recognition of any seasonal or cyclical (time-based) elements which are crucial to the success of the enterprise

**Business opportunities may be influenced by:**

- expected financial viability,
- skills of operator
- amount and types of finance available

**Business goals and objectives may include:**

- goals, objectives, plans, systems and processes
- short, medium or long term goals
- financial projections
- customer needs/marketing projections
-  proposed size and scale of the business
- market focus of the business
- lifestyle issues

**Financial plan may include:**

- the current financial state of the enterprise (or owner/operator)
- financial performance to date (if applicable)
- likely return on investment
- a review of financial inputs required (sources and forms of finance)
- projections of likely financial results (budgeting)
- projected profit targets, pricing strategies, margins
- profit, turnover, capital and equity targets
- risks and measures to manage or minimise risks
- working, fixed, debt and equity capital
- non-recurrent assets calculations
- projections may vary depending on the importance of such information and the stage in the life of the business
- monthly, quarterly or annual returns
- analysis of sales by product/service, identifying where they were sold and to whom
- estimates of profit and loss projections for each forward period
- cash flow estimates for each forward period

# Range Statement

- resources required to implement the proposed marketing and production strategies (staff, materials, plant and equipment)

**Financial resources may include:**

- personal, financial institutions, trade/industry sources
- government sources eg. Federal and State governments which provide various forms of technical and financial assistance including direct cash grants, subsidies, tax concessions and professional and technical advice

**Financial backers may include:**

- owner, family and friends
- providers of venture capital
- banks or finance companies
- leasing and hire purchase financiers

**Production/operations plan may include:**

- options for production, delivery, technical and customer service and support
- means of supply and distribution
- operational targets and action plan may include short, medium or long term goals
- customer requirements, market expectations, budgetary constraints
- industrial relations climate and quality assurance considerations

**Staffing requirements may include:**

- owner/operator
- full-time, part-time staff, permanent, temporary or casual staff
- sub-contractors or external advisers/consultants

**Specialist services may include:**

- accountants
- lawyers and providers of legal advice
- government agencies
- industry/trade associations
- online gateways
- business brokers/business consultants

**Relevant people may include:**

- owner/operator, partners, financial backers
- family members
- clients
- suppliers

## Range Statement

- franchise agency
- trade or industry associations
- regulatory bodies

**Risk management strategies may include:**
- security systems to provide physical security of premises, plant, equipment, goods and services
- security of intellectual property
- knowledge management
- breach of contract, product liability
- measures to manage risk including securing appropriate insurance to cover loss of earnings through sickness/accidents, drought, flood, fire, theft, professional indemnity

**and must include:**
- OHS requirements

**Contingency plan may include:**
- disturbances to cash flow, supply and/or distribution
- sickness or personal considerations

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range of Variables.

**Critical Aspects of Evidence**
- The development of a business plan which provides for finance, marketing and provision of products/ services to facilitate the business goals and objectives
- Ability to identify and plan for OHS, Duty of Care responsibilities (knowledge of relative legislation)

**Underpinning Knowledge***

\* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts.

- Federal, State/Territory and Local Government legislative requirements affecting business operation, especially in regard to OHS and environmental issues, EEO, industrial relations and anti-discrimination
- OHS responsibilities and procedures for identifying hazards relevant to business
- reasons for and benefits of business planning
- planning processes
- preparation of a business plan
- setting goals and objectives
- methods of evaluation
- types of business planning: feasibility studies,

# Evidence Guide

|  | strategic, operational, financial planning |
|---|---|
|  | • relevant industry codes of practice |
|  | • principles of risk management relevant to business planning |

| **Underpinning Skills** | • literacy skills to enable interpretation of business information, |
|---|---|
|  | • communication skills relevant to business performance |
|  | • numeracy skills for data analysis |
|  | • ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities |

| **Resource Implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace. These may include: |
|---|---|
|  | • computer equipment |
|  | • business references such as relevant legislation and regulation relating to the business operation especially OHS requirements |

| **Consistency of Performance** | In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations |
|---|---|

| **Context/s of Assessment** | • Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range of Variables |
|---|---|
|  | • Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package |
|  | • Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment |
|  | • Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit |

## Key Competency Levels

*NB:* *These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 2 | Level 3 | Level 2 | Level 3 | Level 3 | Level 1 |

Three levels of performance denote level of competency required to perform a task.

1. Perform        2. Administer        3. Design

- **Collecting, analysing and organising information** — to develop a business plan
- **Communicating ideas and information** — to gain support for the business plan
- **Planning and organising activities** — to support the business operation
- **Working with teams and others** — to plan staffing and supply of goods and services
- **Using mathematical ideas and techniques** — to aid financial planning
- **Solving problems** — to support business planning
- **Using technology** — to aid business planning

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

## BSBSBM406A Manage finances

**Unit Descriptor**  This unit involves the implementation, monitoring and review of strategies for the ongoing management of finance. It also includes day-to-day financial management of the business. It is suitable for existing micro and small businesses or a department in a larger organisation.

**Competency Field**  Business Management Services

| Element | Performance Criteria |
|---|---|
| 1. Maintain financial records | 1.1 *Financial information* requirements are identified and *specialist services* obtained, as required, to profitably operate and extend the business in accordance with the business plan |
| | 1.2 Financial information records are identified to meet the needs of the business in accordance with legal requirements |
| | 1.3 *Relevant accounting* procedures maintained according to legal requirements and/or specialist services sought as required |
| | 1.4 Administration and financial record keeping procedures are developed and documented in accordance with legal requirements |
| 2 Implement financial plan | 2.1 Financial budgets/projections, including cash flow estimates, are produced as required for each forward period, and distributed to *relevant people* in accordance with legal requirements |
| | 2.2 Business capital is negotiated/ secured/ managed to best enable implementation of the business plan and meet the requirements of *financing bodies* |
| | 2.3 Taxation records are maintained and reporting requirements complied with |
| | 2.4 Strategies to enable adequate financial provision for taxation developed and maintained in accordance with legal requirements |
| | 2.5 Client *credit policies* including contingencies for debtors in default are developed, monitored and maintained to maximise cash flow |
| | 2.6 Key performance indicators are selected to enable ongoing monitoring of financial performance |
| | 2.7 Financial procedures are recorded and communicated to relevant people to facilitate implementation of the business plan |

| Element | Performance Criteria |
|---|---|
| 3. Monitor financial performance | 3.1 Financial performance targets are regularly monitored and reported and data is gathered to establish the extent to which the financial plan has been met |
| | 3.2 Marketing and operational strategies are monitored for their effects on the financial plan |
| | 3.3 Financial ratios are calculated and evaluated according to own/industry benchmarks |
| | 3.4 Financial plan is assessed to determine whether variations or alternative plans are indicated and changed as required |
| | 3.5 Appropriate action is taken to ensure the achievement of profit and return to enable business operation in accordance with the business plan and legal requirements |

## Range Statement

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

| | |
|---|---|
| **Legislation, codes and national standards relevant to the workplace which may include:** | • award and enterprise agreements and relevant industrial instruments |
| | • Federal, State/Territory and Local Government legislative requirements affecting business operation, especially in regard to OHS and environmental issues, EEO, industrial relations and anti-discrimination |
| | • relevant industry codes of practice |
| **Financial information may include:** | • financial budgets |
| | • business capital |
| | • cash flow forecasts |
| | • statements/forecasts |
| | • bookkeeping/ accounting/ stock/ job costing records |
| | • asset registers |
| | • profit and loss statements |
| | • balance sheets |
| | • payroll records, superannuation entitlements |
| | • accrual of staff leave/entitlements |
| | • taxation returns including GST |
| | • business activity statements |
| | • ratios for profitability, liquidity/efficiency/financial structure |

# Range Statement

- risk management
- financial indicators may be short, medium and/or long term
- asset management strategies which may include:
  - owning, leasing, sharing, syndicating
  - maintaining and deploying assets

**Relevant accounting procedures may include:**

- accrual/cash
- single entry/double entry
- manual/computerised

**Specialist services may include:**

- accountants
- lawyers and providers of legal advice
- government agencies
- industry/trade associations
- online gateways
- business brokers/business consultants

**Relevant people may include:**

- owner/operator
- partners
- financial backers
- family members
- franchise agency
- trade or industry associations
- regulatory bodies

**Legal requirements may include:**

- contractual arrangements (e.g. partnership agreements, trust deeds)
- corporations law
- industrial law (for payroll records)
- taxation law

**Financial bodies may include:**

- financiers/ banks/ lending institutions
- shareholders/partners/owners

**Credit policies may include:**

- debt collection
- trading terms
- credit limits
- payment options
- credit references

## Range Statement

**Financial ratios may include:**
- gross profit percentage
- net profit percentage
- expense percentages
- stockturn rates
- staff productivity measures
- return on investment / return on total assets
- current ratio
- liquid ratio
- days stock on hand
- days debtors outstanding
- proprietary/debt ratio

## Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competence for this unit. This is an integral part of the assessment of competence and should be read in conjunction with the Range of Variables.

**Critical Aspects of Evidence**
- ability to develop, implement and review strategies for the ongoing management of finance
- to maintain day-to-day financial management of the business as well as implementation of broad financial strategies

**Underpinning Knowledge***

* At this level the learner must demonstrate understanding of a broad knowledge base incorporating some theoretical concepts.

- Federal, State/Territory and Local Government legislative requirements affecting business operation, especially in regard to OHS and environmental issues, EEO, industrial relations and anti-discrimination
- financial decision making relevant to the business
- basic knowledge of specific tax requirements relevant to the individual industry
- legal obligations for record keeping
- processing financial transactions
- basic accounting principles (single entry/double entry)
- purpose of financial reports
- financial ratios
- interpretation of comparative profit and loss statements
- interpretation of comparative balance sheets

# Evidence Guide

|  |  |
|---|---|
|  | • preparation and interpretation of budget/actual reports |
|  | • stock records/stock control relevant to the business |
|  | • benchmarking |
|  | • methods and relative costs of obtaining finance |

**Underpinning Skills**
- literacy skills to interpret legal requirements, company policies and procedures
- communication including reporting
- numeracy skills to undertake financial calculations
- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

**Resource Implications**
The learner and trainer should have access to appropriate documentation and resources normally used in the workplace

**Consistency of Performance**
In order to achieve consistency of performance, evidence should be collected over a set period of time which is sufficient to include dealings with an appropriate range and variety of situations

**Context/s of Assessment**
- Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range of Variables
- Assessment must take account of the endorsed assessment guidelines in the Business Services Training Package
- Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment
- Assessment should reinforce the integration of the key competencies and the business services common competencies for the particular AQF level. Refer to the Key Competency Levels at the end of this unit

## Key Competency Levels

*NB:   These levels do not relate to the Australian Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.*

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 2 | Level 2 | Level 2 | Level 2 | Level 3 | Level 3 |

Three levels of performance denote level of competency required to perform a task.

1. Perform      2. Administer      3. Design

- **Collecting, analysing and organising information** — to acquire and manage finances
- **Communicating ideas and information** — to obtain and convey financial information
- **Planning and organising activities** — to comply with legal requirements and manage finances
- **Working with teams and others** — to obtain financial information
- **Using mathematical ideas and techniques** — to plan and maintain finances
- **Solving problems** — to maximise business financial viability
- **Using technology** — to optimise business performance

**Please refer to the Assessment Guidelines for advice on how to use the Key Competencies**

## LGACOM401A Administer contracts

**Unit descriptor**

This unit covers the administration, monitoring and transition of contracts.

## Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If ***bold italicised*** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 1 Establish administration procedures | 1.1 ***Administrative processes for contracts*** are implemented according to council quality improvement procedures. |
| | 1.2 Contract requirements are confirmed with relevant contract personnel. |
| | 1.3 Complaint system is established according to council policy and procedures. |
| | 1.4 Consistent and accurate ***records of contract progress*** are maintained. |
| 2 Monitor contract time frame and specifications | 2.1 Regular inspections of contract services are undertaken to ensure compliance with specifications and program for completion. |
| | 2.2 Regular planned progress meetings are held and documented between all contract personnel to ensure problems are identified and resolved early. |
| | 2.3 Variations between the specified scope of services and the contract are identified and documented, and relevant personnel are notified without delay. |
| | 2.4 Testing of services in progress is carried out as required by the contract and in accordance with legislation, regulations and council policy. |

| ELEMENT | PERFORMANCE CRITERIA |
|---------|----------------------|
| 3 Monitor costs | 3.1 Contract costs are monitored on a regular basis to ensure that the service is carried out in accordance with financial and contractual requirements. |
| | 3.2 Payments for contract services are authorised in accordance with the conditions of contract and delegation of officer. |
| | 3.3 Transaction costs are monitored through an established system. |
| 4 Resolve contractual disputes | 4.1 Disagreements are investigated to identify cause and validity. |
| | 4.2 Terms of resolution are negotiated and agreed. |
| | 4.3 Contract provisions for dispute resolution are followed. |
| | 4.4 Legal and management advice is sought at an early stage of any dispute to ensure that the contractor has a clear understanding of the council's legal position and that the council is not exposed to undue legal risk. |
| | 4.5 Appropriate legal advice is sought at any stage in order to clarify any technical aspects of a dispute. |
| 5 Implement contract transition | 5.1 Contract conditions and responsibilities are reviewed with relevant personnel to ensure satisfactory completion of contract. |
| | 5.2 Contract completion is authorised in writing to confirm completed services have been undertaken according to contract objectives and specifications. |
| | 5.3 Final statement is reconciled. |
| | 5.4 Contractor performance and level of service are evaluated against agreed benchmark. |
| | 5.5 End-of-service or renewed contracts are coordinated to meet council requirements. |
| | 5.6 Quality of contract documentation is assessed. |

## RANGE STATEMENT

### Variable                    Scope

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

***Administrative processes for contracts*** may include:
- supervision
- management
- monitoring
- overseeing.

***Records of contract progress*** may include:
- photographs
- data
- progress reports
- customer surveys
- minutes of meetings.

***Services*** may include:
- product
- maintenance
- supply
- cleaning
- waste
- civil
- child care
- other council services.

***Testing*** may include:
- samples
- routine checks
- audits
- observations
- meetings

## RANGE STATEMENT

| **Variable** | **Scope** |
| --- | --- |
| | • laboratory |
| | • OHS |
| | • equal employment opportunity (EEO) |
| ***Payments*** may include: | • progressive |
| | • lump sum |
| ***Conditions of contract*** may include: | • tender documentation |
| | • maintenance plan |
| | • defects liability |
| ***Contractor performance*** is evaluated in terms of: | • adherence to timelines and estimated costs |
| | • progress towards objectives |
| | • adherence to quality standards, and OHS and EEO practices |

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

**Overview of assessment requirements**

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit are also required to be demonstrated.

| **Critical aspects of evidence to be considered** | • Maintenance of files relating to records of meetings, payments, progress reports, file notes and discussions. |
| --- | --- |

- Effective communication with the contractor.

- Monitoring of industry changes.

- Making recommendations covering a range of contracts.

- Maintenance of WorkCover, OHS and audit processes and up-to-date insurance files.

| | |
|---|---|
| **Context of assessment** | On-the-job or in a simulated work environment |
| **Relationship to other units** (prerequisite or co-requisite units) | Prerequisite units: nil<br><br>Co-requisite units: nil |
| **Method of assessment** | The following assessment methods are suggested: |

- observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies

- written and/or oral questioning to assess knowledge and understanding

- completion of workplace documentation

- third-party reports from experienced practitioners

- completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor

| | |
|---|---|
| **Evidence required for demonstration of consistent performance** | Evidence will need to be gathered over time across a range of variables. |

**Required knowledge:**

- OHS policies and procedures

- relevant legislation, regulations and council policies

- contract procedures

- contract law

- knowledge of the contract service

- performance standards and analysis

- complaint procedures

- costing processes.

**Required skills:**

- negotiation and liaison across a range of internal and external customers

- contingency management
- contract interpretation
- project management
- conflict resolution
- client interaction
- financial and time management.

**Resource implications**     Access to a workplace or simulated case study that provides such resources as:

- a range of council contract documentation and records
- relevant commercial law texts on contracts
- relevant council policies and procedures documents.

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

## KEY COMPETENCY   LEVEL   EXAMPLE

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| **Collect, analyse and organise information** | 2 | work according to documented plans, work procedures or council database administration |
| **Communicate ideas and information** | 2 | communicate work requirements to relevant staff or respond to queries from community members |
| **Plan and organise activities** | 2 | construct or maintain work activities according to plans and programs |
| **Work with others and in teams** | 1 | liaise with relevant personnel |
| **Use mathematical ideas and techniques** | 1 | measure and calculate quantities or compile spreadsheets |
| **Solve problems** | 1 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| **Use technology** | 1 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

## LGACOM402A Arrange contracts

### Unit descriptor

This unit covers receiving and evaluating tenders, preparing recommendations and notifying tenderers of the outcome.

### Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If **bold italicised** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 1 Receive tenders | 1.1 Tenders are received in accordance with council procedures. |
| | 1.2 Record of applications is maintained. |
| 2 Evaluate tenders against agreed criteria | 2.1 A comparative statement of tenders highlighting key factors is prepared. |
| | 2.2 Bids are compared and assessed. |
| | 2.3 The bid or shortlist of bids that meets service requirements is identified. |
| | 2.4 Tender presentations are organised and attended to assist in the selection process, where required. |
| 3 Prepare recommendations for council | 3.1 Quality accreditation, previous project records, employment practices and OHS records are verified. |
| | 3.2 An accurate report with clear recommendations is prepared for council to enable informed decision making to occur. |
| 4 ***Formalise*** acceptance of tender | 4.1 A letter of acceptance is sent to successful tenderer outlining accurate details and conditions. |
| | 4.2 Contract documentation is completed in accordance with standards and council procedures. |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|

4.3 Unsuccessful tenderers are informed of outcome according to council procedures.

4.4 Quality of contract documentation is evaluated in the light of tenders received.

## RANGE STATEMENT

**Variable**        **Scope**

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

***Comparative statement*** may include:

- matrix
- data
- criteria
- compliance
- score.

***Council procedures*** may include:

- code of conduct
- probity guidelines
- anti-corruption policies
- equal employment opportunity
- OHS
- risk management
- security of tenders.

***Formalisation*** may include:

- contract signing procedure
- preliminary deposits.

## RANGE STATEMENT

| Variable | Scope |
|---|---|
| *Service requirements* may include: | <ul><li>life-cycle costing</li><li>financial stability</li><li>capacity</li><li>employment and industrial relations history</li><li>quality assurance</li><li>OHS records.</li></ul> |
| *Presentations* may include: | <ul><li>meetings</li><li>site visits</li><li>project inspections</li><li>interviews.</li></ul> |

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

### Overview of assessment requirements

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit are also required to be demonstrated.

| | |
|---|---|
| **Critical aspects of evidence to be considered** | <ul><li>Provide an accurate evaluation report.</li><li>Identify the financial stability of the tenderer.</li><li>Identify the quality standards of the tenderer.</li><li>Ensure confidentiality of the tender process.</li></ul> |
| **Context of assessment** | On the job or in a simulated work environment. |

## EVIDENCE GUIDE

| | |
|---|---|
| **Relationship to other units** (prerequisite or co-requisite units) | Prerequisite units: nil.<br><br>Co-requisite units: nil. |
| **Method of assessment** | The following assessment methods are suggested:<br><br>• observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies<br><br>• written and/or oral questioning to assess knowledge and understanding<br><br>• completion of workplace documentation<br><br>• third-party reports from experienced practitioners<br><br>• completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor. |
| **Evidence required for demonstration of consistent performance** | Evidence will need to be gathered over time across a range of variables. |
| **Required knowledge:** | • relevant council policies and procedures<br><br>• quality assurance methods<br><br>• relevant Australian and industry standards<br><br>• statutory and council tender requirements<br><br>• contractual processes<br><br>• statutory council requirements<br><br>• tendering codes of practice<br><br>• evaluation methods. |
| **Required skills:** | • report writing<br><br>• oral presentation skills and interview techniques<br><br>• applying criteria<br><br>• verifying claims<br><br>• investigating. |

## EVIDENCE GUIDE

**Resource implications**     Access to a workplace or simulated case study that enables competency to be assessed and that provides such resources as:

- relevant council policy and procedure documentation

- relevant Australian and industry standards

- a range of tender examples.

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| Collect, analyse and organise information | 2 | work according to documented plans, work procedures or council database administration |
| Communicate ideas and information | 1 | communicate work requirements to relevant staff or respond to queries from community members |
| Plan and organise activities | 2 | construct or maintain work activities according to plans and programs |
| Work with others and in teams | 2 | liaise with relevant personnel |
| Use mathematical ideas and techniques | 2 | measure and calculate quantities or compile spreadsheets |
| Solve problems | 2 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| Use technology | 0 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

## LGACOM409A Prepare tender documentation

**Unit descriptor**

This unit covers the scoping of contract services, the preparation of tender documentation and the calling for tenders.

## Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If **bold italicised** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 5   Identify the extent and nature of services to be contracted | 5.1   Scope of the services is confirmed and reviewed to ensure parameters meet current requirements.<br>5.2   Statutory and council requirements are identified to determine available options.<br>5.3   Detailed parameters are specified to enable a complete brief to be prepared.<br>5.4   The extent of the contract package is determined. |
| 6   Select appropriate method for tender | 6.1   Area to be contracted is examined.<br>6.2   Contract options are identified and analysed.<br>6.3   Benefits, costs and opportunities of each option are identified.<br>6.4   Appropriate contract option is selected. |
| 7   Prepare tender specifications according to council and Australian standards | 7.1   Complete and detailed service specifications are prepared consistent with council policy and Australian standards and based on service profile and review.<br>7.2   Legislative, OHS and risk management requirements are applied.<br>7.3   Quality assurance methods are applied to the preparation of service specifications.<br>7.4   Service specifications are prepared in consultation with relevant staff that complement required outcomes.<br>7.5   Details on methods, standards, materials, products, contractors and performance period |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| | are provided by quality service specifications, as applicable. |
| 8  Prepare *evaluation* criteria | 8.1  A tender review panel or team is selected from appropriate personnel. |
| | 8.2  Criteria are established based on the specifications, product and service required. |
| | 8.3  Criteria are written clearly to enable bids to be compared. |
| | 8.4  Criteria are ranked against council procedures. |
| 9  Prepare tender document | 9.1  Tender documents are prepared clearly and concisely. |
| | 9.2  Tender documents are prepared that enable competitive pricing of products. |
| | 9.3  Tender documents are designed to enable valid comparisons between tenders received. |
| 10  Invite tenders | 10.1  Invitations are prepared based on the type of tendering method used. |
| | 10.2  Source list is prepared according to council procedures. |
| | 10.3  Advertisement is prepared and placed according to the tender method. |

## RANGE STATEMENT

**Variable**  **Scope**

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If *bold italicised* text is shown in Performance Criteria, details of the text are provided in the Range Statement.

*Services* may include:
- works
- function
- provision
- community expectations.

## RANGE STATEMENT

| Variable | Scope |
|---|---|
| *Parameters* may include: | <ul><li>budget range</li><li>council resources</li><li>level of risk</li><li>council policies, such as 'buy local'.</li></ul> |
| Tendering methodology may include: | <ul><li>lump sum</li><li>unit rate</li><li>partnership</li><li>services process.</li></ul> |
| *Tendering method* may include: | <ul><li>expression of interest</li><li>public tender</li><li>invitation</li><li>verbal</li><li>written</li><li>in-house bid</li><li>select tender.</li></ul> |
| Preparation of tender documentation may include: | <ul><li>documentation developed using standardised format and plain English principles.</li></ul> |
| *Advertisement* may include: | <ul><li>newspaper</li><li>in-house</li><li>trade magazines</li><li>according to council policy.</li></ul> |
| *Legislative* requirements may include: | <ul><li>WorkCover</li><li>risk management</li><li>OHS</li><li>equal employment opportunity</li><li>sexual harassment</li></ul> |

## RANGE STATEMENT

| Variable | Scope |
|---|---|

|  | • public liability |
|  | • professional indemnity |
|  | • evidence of insurance cover |
|  | • quality assurance. |

***Tender documents*** may include:

- general conditions
- special clauses
- technical conditions
- standard specifications
- code of tendering
- statutory declaration
- evaluation criteria
- drawings
- implementation plan
- legislative amendments
- legal endorsement.

Comparative statement may include:

- matrix
- data
- criteria
- compliance
- score.

Formalisation may include:

- contract signing procedure
- preliminary deposits.

***Evaluation*** may include:

- previous projects
- verification of quality accreditation
- capacity
- capability
- risk
- security

## RANGE STATEMENT

| Variable | Scope |
|---|---|
| | • service. |

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

**Overview of assessment requirements**

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit are also required to be demonstrated.

| | |
|---|---|
| **Critical aspects of evidence to be considered** | • Contract authorisation process is undertaken. |
| | • Appropriate advertisement is placed. |
| | • Required specifications are produced. |
| | • Conditions of contract are produced. |
| | • Industry standard conditions of contract are applied. |
| | • Confidentiality and probity are observed for both in-house bids and/or external tenders. |
| **Context of assessment** | On the job or in a simulated work environment. |
| **Relationship to other units** (prerequisite or co-requisite units) | Prerequisite units: nil. |
| | Co-requisite units: nil. |

## EVIDENCE GUIDE

| | |
|---|---|
| **Method of assessment** | The following assessment methods are suggested:<br>• observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies<br>• written and/or oral questioning to assess knowledge and understanding<br>• completion of workplace documentation<br>• third-party reports from experienced practitioners<br>• completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor. |
| **Evidence required for demonstration of consistent performance** | Evidence will need to be gathered over time across a range of variables. |
| **Required knowledge:** | • relevant council policies, procedures and codes of conduct<br>• quality assurance systems<br>• relevant Australian and industry standards<br>• statutory and council tender requirements<br>• contractual processes<br>• industrial agreements<br>• statutory council requirements<br>• tendering codes of practice<br>• national competition policy. |
| **Required skills:** | • report and specification writing<br>• qualitative and quantitative research<br>• analytical<br>• consultation with relevant personnel<br>• specification interpretation<br>• negotiation with relevant internal and external people<br>• observation of protocol and probity policies. |

## EVIDENCE GUIDE

| | |
|---|---|
| **Resource implications** | Access to a workplace or simulated case study that provides the following resources: |

- relevant council policies and procedures

- national competition policy information.

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

## KEY COMPETENCY  LEVEL  EXAMPLE

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| Collect, analyse and organise information | 2 | work according to documented plans, work procedures or council database administration |
| Communicate ideas and information | 2 | communicate work requirements to relevant staff or respond to queries from community members |
| Plan and organise activities | 1 | construct or maintain work activities according to plans and programs |
| Work with others and in teams | 2 | liaise with relevant personnel |
| Use mathematical ideas and techniques | 1 | measure and calculate quantities or compile spreadsheets |
| Solve problems | 2 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| Use technology | 1 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

## LGACOM410A Prepare response to tenders

### Unit descriptor

This unit covers responding to tenders by preparing a tender bid or submission.

### Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If **_bold italicised_** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 11  Identify requirements of the tender | 11.1  Project specifications are identified.<br>11.2  Scope of the job is defined by review of supplied details.<br>11.3  All available information is obtained from the tender supplier, including protocols.<br>11.4  Other successful bid documents are accessed to inform tender bid.<br>11.5  Appropriate personnel are consulted regarding availability and capacity to perform work.<br>11.6  Resources required to compete for tender are determined. |
| 12  Prepare relevant information | 12.1  Resource requirements are identified.<br>12.2  Information is collated and prepared in an appropriate format.<br>12.3  Information is circulated to appropriate personnel for review and modifications are undertaken. |
| 13  Carry out benchmarking of resources with other council or industry sections | 13.1  Section resources are reviewed against current core and non-core activities.<br>13.2  Comparable relevant external bodies are identified.<br>13.3  Value-added opportunities are identified.<br>13.4  Resource requirements are compared. |
| 14  Prepare a tender bid | 14.1  Estimations are detailed in accordance with established procedures and requirements, balancing time, cost, quality and quantity against the tender specifications. |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|

14.2 Work is defined and appropriately sequenced in accordance with requirements.

14.3 Contingency plans are detailed in accordance with established procedures.

14.4 Bid is prepared according to identified format and council requirements.

14.5 Budget approval is sought.

14.6 Bid is submitted to tenderer.

## RANGE STATEMENT

**Variable**       **Scope**

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

***Tenders*** may include:
- in-house
- negotiated
- open
- selective.

Estimates may include:
- oral
- written.

Capacity scan may include:
- resources
- time
- other priorities
- competition
- facilities
- expertise of staff.

***Resources*** may include:
- work
- time
- personnel
- equipment.

## RANGE STATEMENT

| Variable | Scope |
|---|---|
| ***Information*** from tender supplier may include: | <ul><li>specifications</li><li>performance measures</li><li>due date</li><li>number of copies required</li><li>format of information</li><li>protocols.</li></ul> |

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

**Overview of assessment requirements**

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit are also required to be demonstrated.

| | |
|---|---|
| **Critical aspects of evidence to be considered** | <ul><li>Indication of meeting all legislative requirements.</li><li>Resources are available and section has capacity.</li></ul> |
| **Context of assessment** | On the job or in a simulated work environment. |
| **Relationship to other units** (prerequisite or co-requisite units) | Prerequisite units: nil.<br>Co-requisite units: nil. |
| **Method of assessment** | The following assessment methods are suggested:<ul><li>observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies</li><li>written and/or oral questioning to assess knowledge and understanding</li><li>completion of workplace documentation</li></ul> |

## EVIDENCE GUIDE

|  | • third-party reports from experienced practitioners |
|  | • completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor. |
| **Evidence required for demonstration of consistent performance** | Evidence will need to be gathered over time across a range of variables. |
| 15 Required knowledge: | 16 national competition policy and its application at state and enterprise level<br>17 core and non-core activities<br>18 OHS<br>19 risk assessment<br>20 work flow. |
| **Required skills:** | • logical argument for written reports<br>• verbal presentation of bid. |
| **Resource implications** | Access to a workplace or simulated work environment that encompasses the following resources:<br>• copy of national competition policy<br>• council documentation relating to tender process<br>• real or simulated case studies of tender subjects. |

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

## KEY COMPETENCY          LEVEL   EXAMPLE

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| **Collect, analyse and organise information** | 1 | work according to documented plans, work procedures or council database administration |
| **Communicate ideas and information** | 1 | communicate work requirements to relevant staff or respond to queries from community members |
| **Plan and organise activities** | 2 | construct or maintain work activities according to plans and programs |
| **Work with others and in teams** | 2 | liaise with relevant personnel |
| **Use mathematical ideas and techniques** | 2 | measure and calculate quantities or compile spreadsheets |
| **Solve problems** | 1 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| **Use technology** | 1 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

## LGADMIN417A Conduct community consultations

**Unit descriptor**

This unit covers conducting community consultation on behalf of the organisation in line with its strategic vision and program development. The unit is appropriate to employees in all areas of the organisation and covers the process of consultation, from identification of stakeholders and methodologies through to documentation of issues and formulation of recommendations.

## Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If **bold italicised** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 21 Plan community consultation | 21.1 Specific consultation needs are identified based on the issue and organisational requirements. |
| | 21.2 The objectives for the consultation are discussed with appropriate personnel. |
| | 21.3 Consultation methods are identified and discussed with appropriate personnel. |
| | 21.4 A consultation plan is developed and discussed and/or endorsed with appropriate personnel. |
| 22 Facilitate consultation | 22.1 Information is prepared that is clear, accurate and appropriate to the needs of the parties. |
| | 22.2 Measures to expedite community consultation are taken to ensure consultation occurs within an identified time frame. |
| | 22.3 Information is provided to participants at an appropriate time and place. |
| | 22.4 Access and equity requirements are implemented in the consultation. |
| | 22.5 Consultation is undertaken using effective facilitation techniques suited to the target audience. |
| | 22.6 Difficult situations are handled effectively using collaborative problem-solving techniques. |
| 23 Report consultation | 23.1 Responses are collated and formatted to |

| ELEMENT | PERFORMANCE CRITERIA |
|---------|----------------------|
| outcomes | facilitate analysis. |
| | 23.2 A report is prepared that includes recommendations to enable informed decision making. |
| | 23.3 Feedback is provided to interested parties. |
| | 23.4 Other issues raised during consultation are directed to relevant department or person for action. |
| | 23.5 The effectiveness of the consultation process is evaluated and action is taken where necessary. |

## RANGE STATEMENT

| Variable | Scope |
|----------|-------|

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

***Consultation methods*** may include:

- public meetings
- phone-ins
- questionnaires
- informal gatherings
- door knocks
- council meetings.

***Information*** may include:

- graphics
- models
- computer animations
- video displays
- overheads
- handouts
- development plans
- interpreter service.

## RANGE STATEMENT

| Variable | Scope |
| --- | --- |

***Participants*** may include:

- community groups
- other authorities
- individuals
- emergency authorities
- private sector business interests
- special interest groups
- experts.

***Facilitation techniques*** may include:

- active listening
- targeted questioning
- points of clarification
- group discussions
- presentation
- group activities.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

### Overview of assessment requirements

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit are also required to be demonstrated.

**Critical aspects of evidence to be considered**

The demonstrated ability to:

- plan a community consultation to enable and encourage relevant groups or individuals to be involved
- facilitate a community consultation that produces

## EVIDENCE GUIDE

|  | valid and useful information and ensures that the council's image and reputation are maintained or enhanced |
| --- | --- |
|  | • prepare an accurate report on the outcomes of the community consultation that enables informed decision making to occur. |
| **Context of assessment** | • Competency is demonstrated by performance of all stated criteria, with particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope of the Range Statement. |
|  | • Assessment must take account of the endorsed Assessment Guidelines in the Local Government Training Package. |
|  | • Assessment of the performance requirements in this unit should be undertaken in an actual workplace or simulated environment. |
|  | • Assessment should reinforce the integration of the key competencies for the particular AQF level. Refer to the key competency levels at the end of this unit. |
| **Relationship to other units** (prerequisite or co-requisite units) | To enable holistic assessment this unit may be assessed with other units that form part of the job role, in particular: LGACOMP024A Develop community relations. |
| **Method of assessment** | The following assessment methods are suggested: |
|  | • observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies |
|  | • written and/or oral questioning to assess knowledge and understanding |
|  | • completion of workplace documentation |
|  | • third-party reports from experienced practitioners |
|  | • completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor. |

## EVIDENCE GUIDE

| | |
|---|---|
| **Evidence required for demonstration of consistent performance** | Evidence should be collected over a set period of time that is sufficient to include dealings with an appropriate range and variety of situations. |
| **Required knowledge:** | <ul><li>relevant council policies and procedures</li><li>relevant legislation</li><li>access and equity issues</li><li>strategies for consultation</li><li>code of conduct and ethics</li><li>facilitation techniques.</li></ul> |
| **Required skills:** | <ul><li>consultation</li><li>presentation</li><li>negotiation</li><li>report writing</li><li>quantitative and qualitative analysis</li><li>facilitation</li><li>technology</li><li>decision making.</li></ul> |
| **Resource implications** | The learner and trainer should have access to appropriate documentation and resources normally used in the workplace. |

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

## KEY COMPETENCY     LEVEL    EXAMPLE

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| **Collect, analyse and organise information** | 2 | work according to documented plans, work procedures or council database administration |
| **Communicate ideas and information** | 3 | communicate work requirements to relevant staff or respond to queries from community members |
| **Plan and organise activities** | 2 | construct or maintain work activities according to plans and programs |
| **Work with others and in teams** | 2 | liaise with relevant personnel |
| **Use mathematical ideas and techniques** | 1 | measure and calculate quantities or compile spreadsheets |
| **Solve problems** | 2 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| **Use technology** | 2 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

## LGAWORK401A Develop works maintenance schedule

**Unit descriptor**

This unit covers developing a works maintenance schedule to meet the outcomes of a council asset management program.

## Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If **bold italicised** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 24 Prioritise works requirements | 24.1 Work priorities are identified from council works requirements. <br> 24.2 Information from visual inspections and customer reports or requests is considered in accordance with council procedures. |
| 25 Prepare works schedule | 25.1 Scope of work is confirmed to enable a preliminary estimate of resources and scheduling. <br> 25.2 A feasibility plan is prepared to complete the work. <br> 25.3 Recently completed works are reviewed to determine preliminary costs of design and construction. |
| 26 Assess works proposals against budget and asset management program | 26.1 Works proposals are assessed against council budget allocation. <br> 26.2 Proposed maintenance works are prioritised and resources are allocated according to demand and the asset management program. |
| 27 Complete documentation | 27.1 Clear, concise reports are prepared and submitted as required. <br> 27.2 An assets management system is updated in line with council procedures. |

## RANGE STATEMENT

| Variable | Scope |
|---|---|

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

| | |
|---|---|
| Source of funding may include: | • commonwealth, state and local government |
| | • other public tenders |
| | • council loans |
| | • infrastructure bonds. |
| *Assets* may include: | • as determined by the council assets register. |
| *Customers* may include: | • residents |
| | • rate payers |
| | • businesses |
| | • elected members |
| | • other personnel. |
| *Council procedures* may include: | • assets management system |
| | • customer requests |
| | • work plans |
| | • budget and planning estimates. |

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

**Overview of assessment requirements**

A person who demonstrates competency in this unit will be able to perform the

# EVIDENCE GUIDE

outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit must be demonstrated.

| | |
|---|---|
| **Critical aspects of evidence to be considered** | • Assets register is used effectively. |
| | • Council budget and planning estimate processes are adhered to. |
| | • Information is presented clearly and concisely along with recommendations. |
| | • Effective communication strategies for use with council personnel and council customers are developed and implemented. |
| **Context of assessment** | May be assessed through: |
| | • on the job |
| | • simulated workplace environment |
| | • written assignment |
| | • short-answer test |
| | • oral questioning |
| | • observation |
| | • or any combination of the above. |
| **Relationship to other units** (prerequisite or co-requisite units) | To enable holistic assessment this unit may be assessed with other units that form part of the job role. |
| **Method of assessment** | The following assessment methods are suggested: |
| | • observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies |
| | • written and/or oral questioning to assess knowledge and understanding |
| | • completion of workplace documentation |
| | • third-party reports from experienced practitioners |
| | • completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor. |

## EVIDENCE GUIDE

| | |
|---|---|
| **Evidence required for demonstration of consistent performance** | Evidence will need to be gathered over time across a range of variables. |
| **Required knowledge:** | • relevant council policies and procedures<br><br>• range of services required and availability<br><br>• council's assets network<br><br>• maintenance history of assets<br><br>• research and scope of works project<br><br>• other relevant council priorities. |
| **Required skills:** | • project management in an engineering, civil construction or maintenance area<br><br>• interpreting plans, maps, charts, databases and specifications<br><br>• analysing data<br><br>• budgeting and life-cycle costing<br><br>• preparing feasibility plans under supervision. |
| **Resource implications** | In accordance with a range of variable requirements. |

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

## KEY COMPETENCY   LEVEL   EXAMPLE

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| **Collect, analyse and organise information** | 3 | work according to documented plans, work procedures or council database administration |
| **Communicate ideas and information** | 3 | communicate work requirements to relevant staff or respond to queries from community members |
| **Plan and organise activities** | 2 | construct or maintain work activities according to plans and programs |
| **Work with others and in teams** | 3 | liaise with relevant personnel |
| **Use mathematical ideas and techniques** | 3 | measure and calculate quantities or compile spreadsheets |
| **Solve problems** | 2 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| **Use technology** | 2 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

## LGAWORK402A Prepare for operational works

**Unit descriptor**

This unit covers preparing a works project plan that is conveyed to relevant stakeholders.

## Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If ***bold italicised*** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 28  Prepare a plan to undertake works | 28.1  Plans for works tasks are developed within allocated budgets, council policy, relevant management plans and in compliance with relevant structural design standards. <br> 28.2  Plans are communicated to, and understood by, persons responsible for carrying out the works. <br> 28.3  Accurate quantities of resources and materials are assessed to meet the project needs. <br> 28.4  Areas for amenities and/or storage of tools, equipment and materials are identified. <br> 28.5  Works are planned within OHS requirements. <br> 28.6  Liaison with relevant agencies and authorities is undertaken to identify the location of potential hazards. |
| 29  Assess current conditions and traffic volume | 29.1  Relevant authorities and persons affected by the work are informed of traffic control and other necessary measures. <br> 29.2  Traffic control devices and signals are selected in accordance with regulations and standard practice. <br> 29.3  Appropriate traffic control equipment is selected according to the conditions that apply. |
| 30  Inform the general public and relevant authorities | 30.1  Instructions and requests to the public and authorities are transmitted concisely and in accordance with council's operating procedures. <br> 30.2  Public enquiries are responded to in accordance with council procedures. |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| | 30.3 Information relating to incidents or accidents is reported and recorded clearly and accurately in accordance with council and legal requirements. |
| 31 Procure and confirm required materials and equipment | 31.1 Availability of specified resources and materials or alternatives is confirmed. |
| | 31.2 Resources and materials are procured in accordance with council policies and procedures. |

## RANGE STATEMENT

| Variable | Scope |
|---|---|

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

| | |
|---|---|
| Council programs may include: | • council works programs <br> • departmental works programs <br> • depot programs <br> • maintenance programs <br> • works patrols. |
| ***Council procedures*** may include: | • communicating to the public on traffic disruption <br> • planning <br> • seeking permission or approval from other agencies <br> • procuring materials and equipment. |
| Specialists may include: | • state road and rail authorities <br> • civil and traffic engineers <br> • consultants. |

## RANGE STATEMENT

| Variable | Scope |
|---|---|
| Documentation may include: | <ul><li>analysis sheets</li><li>time sheets</li><li>diary entries</li><li>work sheets</li><li>meeting notes</li><li>cost analysis</li><li>planning specifications</li><li>drawing plans.</li></ul> |
| *Authorities* may include: | <ul><li>police</li><li>fire</li><li>emergency.</li></ul> |
| *Traffic* may include: | <ul><li>vehicular</li><li>aircraft</li><li>locomotive</li><li>pedestrian</li><li>livestock.</li></ul> |
| Relevant stakeholders may include: | <ul><li>utilities</li><li>road traffic authorities</li><li>residents</li><li>businesses</li><li>community groups</li><li>community services</li><li>environmental protection agencies.</li></ul> |

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

### Overview of assessment requirements

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit must be demonstrated.

| | |
|---|---|
| **Critical aspects of evidence to be considered** | • Works project information is relayed to relevant staff.<br>• Liaison with public and relevant authorities is undertaken.<br>• Safety of work site is ensured. |
| **Context of assessment** | May be assessed through:<br>• on the job<br>• simulated workplace environment<br>• written assignment<br>• short-answer test<br>• oral questioning<br>• observation<br>• or any combination of the above. |
| **Relationship to other units** (prerequisite or co-requisite units) | To enable holistic assessment this unit may be assessed with other units that form part of the job role. |
| **Method of assessment** | The following assessment methods are suggested:<br>• observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies<br>• written and/or oral questioning to assess knowledge and understanding<br>• completion of workplace documentation |

## EVIDENCE GUIDE

|  |  |
|---|---|
|  | • third-party reports from experienced practitioners |
|  | • completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor. |
| **Evidence required for demonstration of consistent performance** | Evidence will need to be gathered over time across a range of variables. |
| **Required knowledge:** | • materials technology |
|  | • construction technology |
|  | • works methods |
|  | • state and local government standards |
|  | • climatic conditions |
|  | • supply networks and council procurement policies |
|  | • road and traffic safety regulations. |
| **Required skills:** | • organisational capability across a range of physical and human resources |
|  | • communicating with public, other authorities and council staff |
|  | • estimating resources and capacity |
|  | • calculating quantities of resources and materials. |
| **Resource implications** | In accordance with a range of variable requirements. |

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| Collect, analyse and organise information | 2 | work according to documented plans, work procedures or council database administration |
| Communicate ideas and information | 2 | communicate work requirements to relevant staff or respond to queries from community members |
| Plan and organise activities | 2 | construct or maintain work activities according to plans and programs |
| Work with others and in teams | 2 | liaise with relevant personnel |
| Use mathematical ideas and techniques | 2 | measure and calculate quantities or compile spreadsheets |
| Solve problems | 2 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| Use technology | 1 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

## LGAWORK403A Manage civil plant and resources

**Unit descriptor**

This unit covers managing civil plant and resources.

## Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If ***bold italicised*** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 32  Manage job for civil construction | 32.1  Job is planned in accordance with drawings and specifications to enable completion on budget and within allocated time. |
| | 32.2  Operations identified are consistent with the job plan, work activities are integrated and priorities are established consistent with enterprise policies. |
| 33  Select appropriate plant and equipment | 33.1  Plant cycles of operation to undertake specific tasks are calculated. |
| | 33.2  Plant is selected in relation to its cycle of operation in a primary, secondary or static role. |
| | 33.3  Selection of plant and equipment is consistent with work plans, schedules and requirements of the task. |
| | 33.4  Availability of existing internal resources is identified. |
| | 33.5  Type and availability of external resources are assessed against the demands of the project. |
| 34  Supervise and organise operation of plant and equipment | 34.1  Selected plant and equipment are monitored on a regular basis to ensure maximum output is achieved. |
| | 34.2  Regular planned meetings are held between plant supervisors and works personnel to ensure plant operations are carried out with maximum efficiency. |
| | 34.3  Plant and equipment are organised to meet scheduled requirements. |

| **ELEMENT** | **PERFORMANCE CRITERIA** |
|---|---|
| | 34.4 Testing of works in progress is carried out to ensure selected plant and equipment are achieving specified standards in an efficient manner. |
| | 34.5 Consistent and accurate records of plant and equipment operation and use are recorded and maintained. |
| | 34.6 Progressive checks are conducted to ensure both routine and periodic plant and equipment maintenance is being carried out. |
| 35 Maintain records | 35.1 Records are kept in accordance with council requirements. |
| | 35.2 Details are recorded clearly, accurately and legibly. |
| | 35.3 Records are secured, made accessible and kept up to date. |

## RANGE STATEMENT

| **Variable** | **Scope** |
|---|---|

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

| Types of **plant** may include: | • bulldozers |
|---|---|
| | • graders |
| | • scrapers |
| | • compactors |
| | • excavators |
| | • backhoes |
| | • skid steer |
| | • machines |
| | • cranes |
| | • profilers |

## RANGE STATEMENT

| **Variable** | **Scope** |
|---|---|

- sweepers
- trucks
- tankers
- compaction plant.

***Records*** may include:

- manufacturers' data sheet
- maintenance
- time sheets
- plant usage
- fuel
- oils
- spare parts.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

### Overview of assessment requirements

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit must be demonstrated.

| | |
|---|---|
| **Critical aspects of evidence to be considered** | • Knowledge of operations and functions of plant and equipment used in civil construction and maintenance is demonstrated. |
| | • Safety at work site and plant operation is achieved. |
| | • Relevant council policies and procedures in the operation and maintenance of plant and equipment are adhered to. |
| **Context of assessment** | May be assessed through: |
| | • on the job |
| | • simulated workplace environment |
| | • written assignment |
| | • short-answer test |
| | • oral questioning |
| | • observation |
| | • or any combination of the above. |
| **Relationship to other units** (prerequisite or co-requisite units) | To enable holistic assessment this unit may be assessed with other units that form part of the job role. |
| **Method of assessment** | The following assessment methods are suggested: |
| | • observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies |
| | • written and/or oral questioning to assess knowledge and understanding |

## EVIDENCE GUIDE

|  |  |
|---|---|
|  | • completion of workplace documentation |
|  | • third-party reports from experienced practitioners |
|  | • completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor. |
| **Evidence required for demonstration of consistent performance** | Evidence will need to be gathered over time across a range of variables. |
| **Required knowledge:** | • plant and equipment functions |
|  | • manufacturers' specifications |
|  | • works management |
|  | • works methods relating to plant operation |
|  | • records maintenance. |
| **Required skills:** | • plant and equipment |
|  | • operating procedures |
|  | • prioritising and scheduling |
|  | • organising |
|  | • supervising |
|  | • estimating |
|  | • record keeping. |
| **Resource implications** | In accordance with a range of variable requirements. |

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

## KEY COMPETENCY   LEVEL   EXAMPLE

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| **Collect, analyse and organise information** | 2 | work according to documented plans, work procedures or council database administration |
| **Communicate ideas and information** | 2 | communicate work requirements to relevant staff or respond to queries from community members |
| **Plan and organise activities** | 2 | construct or maintain work activities according to plans and programs |
| **Work with others and in teams** | 2 | liaise with relevant personnel |
| **Use mathematical ideas and techniques** | 2 | measure and calculate quantities or compile spreadsheets |
| **Solve problems** | 1 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| **Use technology** | 2 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

## LGAWORK501A Prepare preliminary design for operational works

**Unit descriptor**

This unit covers preparing works related to preliminary design for community consultation and council approval.

## Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If **bold italicised** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 36  Establish design criteria | 36.1  Project objectives are defined so that the preliminary design can address required outcomes. |
|  | 36.2  Regulations and restrictions on design are identified to ensure design meets relevant standards and codes. |
|  | 36.3  The physical dimensions of the project are specified to enable the design to proceed. |
|  | 36.4  An appropriate level of design detail is established to enable a preliminary design to be prepared. |
| 37  Prepare alternative concepts | 37.1  Similar projects are examined to build on existing knowledge and improve efficiency. |
|  | 37.2  Feasible concept layouts and supporting statements are prepared that satisfy design objectives within design parameters. |
|  | 37.3  Alternative concepts are prepared with supporting statements. |
|  | 37.4  Indicative cost estimates are prepared. |
| 38  Conduct a safety design audit | 38.1  Agents or authorities relevant to the design are identified. |
|  | 38.2  A safety design audit is conducted. |
|  | 38.3  Safety design audit feedback is incorporated into the preliminary design. |
| 39  Obtain project approvals | 39.1  Relevant utilities that are to be affected, or |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| | whose assistance is required, are notified. |
| | 39.2 Necessary approvals and permits from relevant authorities are obtained. |
| 40 Finalise public consultation and prepare report to council | 40.1 An accurate preliminary design report is prepared. |
| | 40.2 Consultation opportunities are provided for interested parties to view plan. |
| | 40.3 Public feedback is reported in accordance with statutory and legislative requirements. |
| | 40.4 Modifications are made to incorporate amendments, and design criteria are adjusted accordingly. |
| | 40.5 Final concept plan is submitted to council. |

## RANGE STATEMENT

| Variable | Scope |
|---|---|

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

| | |
|---|---|
| **Alternative concepts** may include: | • visuals |
| | • environment |
| | • design |
| | • style |
| | • cost. |
| **Cost estimates** may include: | • review of existing project costs |
| | • industry journals |
| | • contractor quotes |
| | • cost assessors |
| | • estimating and quantity surveying firms |
| | • data services. |

## RANGE STATEMENT

| Variable | Scope |
|---|---|
| ***Agents or authorities*** may include: | • service providers (gas, water, electricity, utilities and communications)<br><br>• environment protection authorities<br><br>• planning bodies<br><br>• state road authorities<br><br>• community organisations. |
| ***Design*** may include: | • erosion and sediment control plan references<br><br>• Australian design standards. |

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

### Overview of assessment requirements

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit must be demonstrated.

| **Critical aspects of evidence to be considered** | • Australian design standards are applied.<br><br>• Review of environmental factors for maintenance and construction projects is conducted.<br><br>• Safety design audit is undertaken. |
|---|---|
| **Context of assessment** | May be assessed through:<br><br>• on the job<br><br>• simulated workplace environment<br><br>• written assignment<br><br>• short-answer test |

## EVIDENCE GUIDE

|  |  |
|---|---|
|  | • oral questioning |
|  | • observation |
|  | • or any combination of the above. |
| **Relationship to other units** (prerequisite or co-requisite units) | To enable holistic assessment this unit may be assessed with other units that form part of the job role. |
| **Method of assessment** | The following assessment methods are suggested: <br> • observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies <br> • written and/or oral questioning to assess knowledge and understanding <br> • completion of workplace documentation <br> • third-party reports from experienced practitioners <br> • completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor. |
| **Evidence required for demonstration of consistent performance** | Evidence will need to be gathered over time across a range of variables. |
| **Required knowledge:** | • relevant government authorities and council procedures and policies <br> • relevant legislation, codes of practice and standards <br> • contractual and legal requirements <br> • environmental management strategy <br> • design standards. |
| **Required skills:** | • preparing preliminary design to meet specifications <br> • interpreting relevant government legislation and council policies <br> • presenting material to council and customers <br> • computer application of design aid |

## EVIDENCE GUIDE

- interpreting plans, maps, level sheets and specifications
- chart reading
- financial estimations and alternate concepts.

**Resource implications**     In accordance with a range of variable requirements.

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| **Collect, analyse and organise information** | 3 | work according to documented plans, work procedures or council database administration |
| **Communicate ideas and information** | 3 | communicate work requirements to relevant staff or respond to queries from community members |
| **Plan and organise activities** | 3 | construct or maintain work activities according to plans and programs |
| **Work with others and in teams** | 2 | liaise with relevant personnel |
| **Use mathematical ideas and techniques** | 3 | measure and calculate quantities or compile spreadsheets |
| **Solve problems** | 3 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| **Use technology** | 2 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

# LGAWORK502A Prepare detailed works project documentation

**Unit descriptor**

This unit covers preparing relevant project documentation including specifications, key invoices and estimates.

## Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If **bold italicised** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 41 Prepare design program | 41.1 Design elements are listed to determine the scope and purpose of the design.<br>41.2 Time constraints and financial limitations are identified.<br>41.3 Appropriate technical, physical and human resources are assigned to the project.<br>41.4 Complementary works are identified to enable an efficient design program to be prepared. |
| 42 Undertake design and prepare working drawings | 42.1 Available information is reviewed and specifications are identified.<br>42.2 Design manuals are used to ensure the design complies with all statutory and council requirements.<br>42.3 Working drawings that comply with the design brief are prepared and recorded. |
| 43 Prepare work specifications | 43.1 Complete and detailed works specifications are prepared at a level consistent with council and relevant standards.<br>43.2 Quality assurance methods are applied to the preparation of works specifications.<br>43.3 Works specifications are prepared that complement working drawings.<br>43.4 Works specifications provide detail on methods, standards, materials, products and contractors as applicable. |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 44  Prepare detailed estimate | 44.1  Detail drawings are utilised to prepare an accurate bill of quantities. |
|  | 44.2  Competitive rates for provision of materials and services are obtained. |
|  | 44.3  Primary cost items are specified and costed. |
|  | 44.4  An estimate for contingencies is made within prepared estimates. |
|  | 44.5  The cost of project support resources is included in detailed estimates. |

## RANGE STATEMENT

**Variable**          **Scope**

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

**Design manuals** may include:
- building regulations
- Australian standards
- state road authority
- design manuals
- Austroad design manuals
- reference texts
- council or authority standards
- quality assurance manuals
- water and sewerage authority and design or industry standards.

**Complementary works** may include:
- other works that can be carried out effectively and cost efficiently whilst resources are available.

**Contingencies** may include:
- weather conditions
- industrial relations
- latent conditions

## RANGE STATEMENT

| Variable | Scope |
|---|---|
| | • additional supervision |
| | • variation in materials cost and availability. |
| ***Estimates*** may include: | • day labour |
| | • contract labour. |
| ***Council requirements*** may include: | • works specifications |
| | • design procedures. |

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

**Overview of assessment requirements**

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit must be demonstrated.

| **Critical aspects of evidence to be considered** | • A range of design criteria is included. |
|---|---|
| | • Drawings are undertaken to meet established standards. |
| | • Works specifications are prepared. |
| | • Estimates are detailed and include contingencies. |
| **Context of assessment** | May be assessed through: |
| | • on the job |
| | • simulated workplace environment |
| | • written assignment |
| | • short-answer test |

## EVIDENCE GUIDE

- oral questioning

- observation

- or any combination of the above.

| | |
|---|---|
| **Relationship to other units** (prerequisite or co-requisite units) | To enable holistic assessment this unit may be assessed with other units that form part of the job role. |

**Method of assessment**

The following assessment methods are suggested:

- observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies

- written and/or oral questioning to assess knowledge and understanding

- completion of workplace documentation

- third-party reports from experienced practitioners

- completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor.

**Evidence required for demonstration of consistent performance**

Evidence will need to be gathered over time across a range of variables.

**Required knowledge:**

- federal and state government acts

- local government regulations

- design standards and specifications

- drawing standards and specifications

- interpretation and analysis of resources costing.

**Required skills:**

- interpreting relevant acts, regulations, codes, policies, procedures and standards

- interpreting engineering design criteria

- engineering drafting

- calculating weight, volume, ratio and quantity.

**Resource implications**

In accordance with a range of variable requirements.

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| **Collect, analyse and organise information** | 3 | work according to documented plans, work procedures or council database administration |
| **Communicate ideas and information** | 3 | communicate work requirements to relevant staff or respond to queries from community members |
| **Plan and organise activities** | 3 | construct or maintain work activities according to plans and programs |
| **Work with others and in teams** | 2 | liaise with relevant personnel |
| **Use mathematical ideas and techniques** | 3 | measure and calculate quantities or compile spreadsheets |
| **Solve problems** | 3 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| **Use technology** | 2 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

## LGAWORK503A Undertake project investigation

### Unit descriptor

This unit covers undertaking the research of a works project to determine scope and relevant stakeholders.

### Application of the competency

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the required performance needed to demonstrate achievement of the Element. If **bold italicised** text is used, details of the text are provided in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide. |
| 45  Determine parameters of project | 45.1  Preliminary scope of project is confirmed and reviewed to ensure parameters meet current requirements. |
| | 45.2  Detailed design parameters are specified to enable a complete design brief to be prepared. |
| 46  Obtain information on existing conditions | 46.1  Surveys of existing conditions are undertaken that are relevant to the proposed works and that impact on the design parameters. |
| | 46.2  Liaison with relevant statutory authorities and affected parties is undertaken to ensure works can be coordinated. |
| | 46.3  The impact of works on existing assets and the environment is assessed through liaison with relevant and affected parties. |
| 47  Prepare existing conditions plan | 47.1  An accurate, existing conditions plan is prepared from all collated data to enable a detailed design to proceed. |
| | 47.2  An existing conditions plan is produced within regulatory and accepted drafting standards. |

## RANGE STATEMENT

| Variable | Scope |
| --- | --- |

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

The following variables may be present with training and assessment depending on the work situation, needs of the trainee, accessibility of the item, and local industry and regional contexts. If **bold italicised** text is shown in Performance Criteria, details of the text are provided in the Range Statement.

*Requirements* may include:
- budget
- project scope
- facilities
- regulations
- user group needs
- life cycle costing
- environment management.

*Surveys* may include:
- traffic counts
- topographical survey
- features survey
- historical review
- title boundaries
- local knowledge
- levels survey
- cross-sectional
- people opinion survey
- detailing and locating services such as gas, water, electricity and telecommunications.

*Drafting standards* may include:
- Australian standards code for building and engineering AS1100 — technical drawing
- council requirements
- council policies and standards.

## RANGE STATEMENT

| Variable | Scope |
|---|---|
| Stakeholders may include: | • community groups<br>• related government bodies and authorities<br>• internal council sections. |
| Relevant *authorities* may include: | • roads and traffic authorities<br>• gas<br>• electricity<br>• other utilities. |
| *Affected parties* may include: | • business<br>• community groups<br>• residents. |

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence. It provides essential advice for assessment of the unit of competency and must be read in conjunction with the Performance Criteria, the Range Statement and the Assessment Guidelines of the relevant Training Package.

**Overview of assessment requirements**

A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit must be demonstrated.

| **Critical aspects of evidence to be considered** | • Liaison with council and other customers is undertaken.<br>• Design parameters are identified.<br>• Impact of project on assets and environment is identified. |
|---|---|

## EVIDENCE GUIDE

| | |
|---|---|
| **Context of assessment** | May be assessed through:<br><br>• on the job<br><br>• simulated workplace environment<br><br>• written assignment<br><br>• short-answer test<br><br>• oral questioning<br><br>• observation<br><br>• or any combination of the above. |
| **Relationship to other units** (prerequisite or co-requisite units) | To enable holistic assessment this unit may be assessed with other units that form part of the job role. |
| **Method of assessment** | The following assessment methods are suggested:<br><br>• observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies<br><br>• written and/or oral questioning to assess knowledge and understanding<br><br>• completion of workplace documentation<br><br>• third-party reports from experienced practitioners<br><br>• completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor. |
| **Evidence required for demonstration of consistent performance** | Evidence will need to be gathered over time across a range of variables. |
| **Required knowledge:** | • assets network<br><br>• design and drafting principles<br><br>• related government bodies<br><br>• contractual requirements<br><br>• acts, regulations, standards and codes of practice<br><br>• council budget cycle. |

## EVIDENCE GUIDE

| | |
|---|---|
| **Required skills:** | • interpersonal communication techniques |
| | • time management |
| | • risk management |
| | • high level negotiation skills |
| | • presenting plans |
| | • collating data |
| | • research expertise. |
| **Resource implications** | In accordance with a range of variable requirements. |

## Key competencies

The seven key competencies represent generic skills considered necessary for effective work participation. The numbering against each of the key competencies indicates the performance level required in this unit.

Level 1 represents the competence to undertake tasks effectively.

Level 2 represents the competence to manage tasks.

Level 3 represents the competence to use concepts for evaluating and reshaping tasks.

| KEY COMPETENCY | LEVEL | EXAMPLE |
|---|---|---|
| **Collect, analyse and organise information** | 3 | work according to documented plans, work procedures or council database administration |
| **Communicate ideas and information** | 3 | communicate work requirements to relevant staff or respond to queries from community members |
| **Plan and organise activities** | 1 | construct or maintain work activities according to plans and programs |
| **Work with others and in teams** | 1 | liaise with relevant personnel |
| **Use mathematical ideas and techniques** | 2 | measure and calculate quantities or compile spreadsheets |
| **Solve problems** | 2 | make adjustments to suit needs or respond to community member queries and deliver quality customer service |
| **Use technology** | 1 | use appropriate technology such as personal computers or pre-test equipment in the performance of duties |

# MEM30.1A Use computer aided drafting systems to produce basic engineering drawings

| | |
|---|---|
| **Unit descriptor** | This unit covers producing basic engineering drawings using a CAD system, under the direction of a supervisor. |
| **Prerequisites** | |
| Path 1 | 16.6 Organise and communicate information |
| | 16.8 Interact with computing technology |
| **Competency field** | Engineering technician |
| **Application of the competency** | This unit applies to the production of drawings according to defined parameters and predetermined specifications that include materials, tolerances, codes and other specifications. All work is conducted under supervision. |
| | Standard CAD software would be used including inbuilt file management, macros and reports. |
| | Drawings include plans, diagrams, charts, circuits, systems or schematics. |
| **Related units** | If basic engineering drawings are required, then Unit 30.2 (Produce basic engineering graphics) should be selected. If detailed engineering drawings are required, then Unit 30.3 (Produce detailed engineering drawings) should be selected. |
| **Band** | None |
| **Unit weight** | None |
| **Notes** | There are no notes for this unit. |

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements are the essential outcomes of the unit of competency. | Together, performance criteria specify the requirements for competent performance. Text in *italics* is explained in the range statement following. |
| 1 Prepare the CAD environment | 1.1 All relevant manuals, instructions and operating procedures for the CAD software are obtained in accordance with workplace procedures. |
| | 1.2 The CAD package is booted up in accordance with workplace procedures. |
| | 1.3 Screen display areas and *basic parameters* are set in accordance with instructions. |
| 2 Produce a basic drawing | 2.1 *Basic CAD drawings* are created and guidance is sought as required. |
| | 2.2 Drawings are prepared in accordance with AS 1100 or equivalent or in accordance with standard operating procedures. |
| | 2.3 As required, CAD drawings are reviewed with |

|   |   |   |   |
|---|---|---|---|
|   |   |   | supervisor and/or other designated staff in accordance with company procedures. |
| 3 | Modify existing CAD drawings | 3.1 | Existing CAD drawings are located and modified by adding, deleting or changing drawing elements within that drawing. |
| 4 | Produce output | 4.1 | Drawing files are saved in the appropriate format in accordance with standard operating procedures. |
|   |   | 4.2 | Drawing files are printed out using plotter or *equivalent devices*. |
| 5 | Perform exit and shut-down procedures | 5.1 | Programs and computer are shut down in accordance with workplace procedures. |

## Range statement

The range statement provides information about the context in which the unit of competency is carried out. The variables and scope cater for different work requirements, work practices and knowledge between States, Territories and the Commonwealth, and between organisations and workplaces. The range statement relates to the unit as a whole and provides a focus for assessment. Text in *italics* in the performance criteria is explained here.

The following variables may be present and may include, but are not limited to, the examples listed under the scope. All work is undertaken to relevant legislative requirements, where applicable.

| Variable | Scope |
|---|---|
| *Basic parameters* | Include layer or level, line type, line width, colour and text format etc. |
| *Basic CAD drawings* | Include the following characteristics: lines, arcs, circles, polygons, ellipses, hatching or filling of areas, text, dimensions and tangents |
| *Equivalent devices* | May include ink jet printers or the like |

## EVIDENCE GUIDE

The evidence guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the unit descriptor, performance criteria, range statement and the assessment guidelines for the Metal and Engineering Training Package.

| | |
|---|---|
| **Overview of assessment requirements** | A person who demonstrates competency in this unit must be able to use computer aided drafting systems to produce basic engineering drawings. Competency in this unit cannot be claimed until all prerequisites have been satisfied. |
| **Context of assessment** | This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate. |

| | |
|---|---|
| **Interdependent assessment** | This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with producing basic engineering drawings using computer aided drafting systems, or other units requiring the exercise of the skills and knowledge covered by this unit. |
| **Method of assessment** | Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials. |
| **Consistency of performance** | Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts. |
| **Required skills** | Look for evidence that confirms skills in:<br><br>• reading and interpreting engineering specifications<br>• organising information<br>• using computer and peripherals<br>• using CAD program<br>• preparing simple drawings in plane orthogonal, isometric projection or equivalent |
| **Required knowledge** | Look for evidence that confirms knowledge of:<br><br>• CAD program capabilities and processes |

# MEM30.2A Produce basic engineering graphics

| | |
|---|---|
| **Unit descriptor** | This unit covers producing drawings or similar graphical representations where the critical dimensions and associated tolerances and design specifications are predetermined. |
| **Prerequisites** | |
| Path 1 | 16.6 Organise and communicate information |
| | 16.8 Interact with computing technology |
| **Competency field** | Engineering technician |
| **Application of the competency** | This unit applies to any of the full range of engineering disciplines. All work is carried out under supervision. Manual drafting or CAD drawing equipment may be used. |
| **Related units** | If CAD skills are required, then Unit 30.1 (Use computer aided drafting systems to produce basic engineering drawings) and its prerequisites should be selected |
| | If additional CAD skills are required, then Unit 30.4 (Use CAD to create and display 3D models) should also be selected. If fully detailed drawings are required, then Unit 30.3 (Produce detailed engineering drawings) should be selected. |
| **Band** | None |
| **Unit weight** | None |
| **Notes** | There are no notes for this unit. |

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements are the essential outcomes of the unit of competency. | Together, performance criteria specify the requirements for competent performance. Text in *italics* is explained in the range statement following. |
| 1 Identify drawing requirements | 1.1 All relevant job requirements and design *specifications* are obtained in accordance with workplace procedures. |
| | 1.2 Drawing requirements and specifications are identified and interpreted. |
| 2 Prepare assembly, layout and general drawings in accordance with instructions | 2.1 *Drawings* are prepared in plane orthogonal, isometric projection or equivalent. |
| | 2.2 Problems are resolved in *consultation* with a supervisor. |

| | |
|---|---|
| 3 Draw sections through simple engineering components as required for clarity | 3.1 Sections are drawn through an engineering component incorporating correct use of cutting plane(s) symbols and conventions. |
| 4 Select physical dimensions from manufacturer handbooks | 4.1 Where required, components and/or materials are selected from supplier/manufacturer catalogues using predetermined design specifications. |
| 5 Prepare engineering parts list | 5.1 An *engineering parts list* is produced in accordance with workplace procedures. |
| 6 Issue or file completed drawing/parts list | 6.1 Approved drawings and/or parts lists are stored, catalogued and *issued* in accordance with standard operating procedures. |

## Range statement

The range statement provides information about the context in which the unit of competency is carried out. The variables and scope cater for different work requirements, work practices and knowledge between States, Territories and the Commonwealth, and between organisations and workplaces. The range statement relates to the unit as a whole and provides a focus for assessment. Text in *italics* in the performance criteria is explained here.

The following variables may be present and may include, but are not limited to, the examples listed under the scope. All work is undertaken to relevant legislative requirements, where applicable.

| Variable | Scope |
|---|---|
| *Specifications* | May be obtained form design information, customer, ideas, concepts/expectations/requirements, sketches, preliminary layouts |
| *Drawings* | Include plans, diagrams, charts |
| *Consultation* | May include reference to appropriate personnel including technical supervisors, manufacturers, suppliers, contractors, customers |
| *Engineering parts list* | May include part name, description of part, material specification or part number, quantities and other details as required |
| *Issued drawings* | Hard copy, photographic, slide or transparency form including presentation as a single drawing and/or with other drawings, support documentation as a package |

## Evidence guide

The evidence guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the unit descriptor, performance criteria, range statement and the assessment guidelines for the Metal and Engineering Training Package.

| | |
|---|---|
| **Overview of assessment requirements** | A person who demonstrates competency in this unit must be able to produce basic engineering graphics. Competency in this unit cannot be claimed until all prerequisites have been satisfied. |
| **Context of assessment** | This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic |

|  |  |
|---|---|
|  | workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate. |
| **Interdependent assessment** | This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with producing basic engineering graphics, or other units requiring the exercise of the skills and knowledge covered by this unit. |
| **Method of assessment** | Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials. |
| **Consistency of performance** | Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts. |

**Required skills**

Look for evidence that confirms skills in:

- correctly using and maintaining equipment including CAD
- manual drafting, filing and printing
- reading and interpreting specifications
- communicating
- visualising components
- preparing a drawing in plane orthogonal, isometric projection or equivalent

**Required knowledge**

Look for evidence that confirms knowledge of:

- drafting media including cartridge paper, tracing paper, drafting film, plan printing paper
- layout conventions
- effective use of blank space, location of notes and symbols
- sectioning

- draw sections through an engineering component incorporating correct use of cutting plane(s) symbols and conventions.
- overview of graphical techniques
- assembly drawings, explosion drawings
- schematics/line drawings, graphs, pictorials

# MEM30.3A Produce detailed engineering drawings

| | |
|---|---|
| **Unit descriptor** | This unit covers producing detailed drawings of engineering components complete with surface texture details and dimensions. |

**Prerequisites**

| | |
|---|---|
| Path 1 | 16.6 Organise and communicate information |
| | 16.8 Interact with computing technology |
| | 30.1 Use computer aided drafting systems to produce basic engineering drawings |
| | 30.2 Produce basic engineering graphics |
| **Competency field** | Engineering technician |
| **Application of the competency** | This unit applies to all engineering and manufacturing environments. |
| | Work is carried out under supervision. |
| | Drawings may be produced with or without the use of computer aided design (CAD) systems. |
| **Related units** | None |
| **Band** | None |
| **Unit weight** | None |
| **Notes** | There are no notes for this unit. |

| **Elements** | **Performance criteria** |
|---|---|
| Elements are the essential outcomes of the unit of competency. | Together, performance criteria specify the requirements for competent performance. Text in *italics* is explained in the range statement following. |
| 1 Determine drawing requirements | 1.1 Drawing requirements are checked and interpreted from work order or similar. |
| | 1.2 Required information is sourced from workshop manuals, customer specifications, product suppliers, designers or similar. |
| | 1.3 Scope of drawing including layout, additional required information and resources is planned. |
| 2 Produce detail drawings in third angle projection, including auxiliary views, sections and assemblies | 2.1 Drawing details including assembly and components are completed as per AS 1100 or similar. |
| | 2.2 Dimensions of various components are determined and inserted where required. |
| | 2.3 Appropriate symbols for limits and fits, surface |

texture and *geometric tolerances* are included.

2.4 *Simple components or layouts* are drawn in third angle projection.

2.5 An auxiliary view is drawn of a component, given two views.

2.6 Correct convention for *parts* is shown.

3 Issue and/or file drawing
3.1 Drawing is issued and/or filed according to workplace procedures.

## Range statement

The range statement provides information about the context in which the unit of competency is carried out. The variables and scope cater for different work requirements, work practices and knowledge between States, Territories and the Commonwealth, and between organisations and workplaces. The range statement relates to the unit as a whole and provides a focus for assessment. Text in *italics* in the performance criteria is explained here.

The following variables may be present and may include, but are not limited to, the examples listed under the scope. All work is undertaken to relevant legislative requirements, where applicable.

| Variable | Scope |
| --- | --- |
| *Geometric tolerances* | Simple geometry tolerancing (no datum references, flatness, roundness etc.) |
| | Geometry tolerance with datum reference (e.g. parallel squareness) |
| *Simple components or layouts* | May include fabricated components, machined components, cast and forged components, structural details, electrical electronic components, fluid power components |
| *Parts* | Mechanical components such as fasteners, bearings, seals, gears, keys, splines etc. |
| | Electrical components such as cables, connectors, terminations etc. |
| | Fluid power components such as actuators, valves, hoses, connectors, relays etc. |

## Evidence guide

The evidence guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the unit descriptor, performance criteria, range statement and the assessment guidelines for the Metal and Engineering Training Package.

| | |
| --- | --- |
| **Overview of assessment requirements** | A person who demonstrates competency in this unit must be able to produce detailed engineering drawings. Competency in this unit cannot be claimed until all prerequisites have been satisfied. |
| **Context of assessment** | This unit may be assessed on the job, off the job or a combination of both. Where assessment occurs off the job, i.e. the candidate is not in productive work, an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered would be demonstrated by an individual working alone or as part of a team. The |

|  |  |
|---|---|
|  | assessment environment should not disadvantage the candidate. |
| **Interdependent assessment** | This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with producing detailed engineering drawings, or other units requiring the exercise of the skills and knowledge covered by this unit. |
| **Method of assessment** | Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials. |
| **Consistency of performance** | Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts. |

**Required skills**

Look for evidence that confirms skills in:

- drawing
- documenting
- applying principles of geometric tolerances
- identifying functional surfaces and datums on assembly drawings
- producing detail drawings of machine components and dimension from datums

**Required knowledge**

Look for evidence that confirms knowledge of:

- projection
- auxiliary views, special attention
- detail drawing methods
- standard engineering drawing symbols, references and terminology
- projection lines
- arrangements
- general tolerancing
- limits and fits

- shaft and hole basis
- extremes of fit
- surface texture
- selection of standard roughness values for given processes
- application of surface finish symbols to drawings
- selection and application of equivalent surface roughness numbers
- geometric tolerancing
- simple geometry tolerancing (no datum references, flatness, roundness etc.)
- geometry tolerance with datum reference (e.g. parallel squareness)

# MEM30.4A Use CAD to create and display 3D models

| | |
|---|---|
| **Unit descriptor** | This unit covers using a CAD program to produce and plot basic three dimensional view drawings. |
| **Prerequisites** | |
| Path 1 | <span style="color:red">16.6 Organise and communicate information</span> |
| | 16.8 Interact with computing technology |
| | 30.1 Use computer aided drafting systems to produce basic engineering drawings |
| **Competency field** | Engineering technician |
| **Application of the competency** | This unit applies to the production of three dimensional models using computer aided design and drawing software and associated equipment. This will include the use of region and solid modelling techniques, section views, and pre-drawn library files. Work also includes extraction of properties and application of basic rendering techniques. |
| | All work is conducted under supervision. |
| **Related units** | None |
| **Band** | None |
| **Unit weight** | None |
| **Notes** | There are no notes for this unit. |

| Elements | Performance criteria |
|---|---|
| Elements are the essential outcomes of the unit of competency. | Together, performance criteria specify the requirements for competent performance. Text in *italics* is explained in the range statement following. |
| 1 Set up a three dimensional environment | 1.1 Set up a three dimensional environment on the screen to allow *multiple viewing*. |
| 2 Create three dimensional views | 2.1 Three dimensional views are created on the screen by manipulation of drawing planes and insertion of three dimensional geometric shapes. |
| | 2.2 Any plane of the three dimensional view is drawn on. |
| | 2.3 Editing functions are used to modify *three dimensional geometric shapes* in creating three dimensional views. |
| 3 Display three dimensional views | 3.1 Wire line, surface and solid face displays are produced in isometric, perspective and orthographic projections. |
| 4 Extract mass and area properties of a 3D model | 4.1 The mass and surface area of a given solid model made from a nominated material is extracted. |

| | | | |
|---|---|---|---|
| 5 | Apply basic rendering techniques to a 3D model | 5.1 | A solid model is rendered to a specified set of criteria. |
| 6 | Save completed drawing file in various formats | 6.1 | File is saved in an appropriate format to enable retrieval and use in a CAD system. |
| | | 6.2 | File is saved in other formats to enable retrieval in other software applications. |

## Range statement

The range statement provides information about the context in which the unit of competency is carried out. The variables and scope cater for different work requirements, work practices and knowledge between States, Territories and the Commonwealth, and between organisations and workplaces. The range statement relates to the unit as a whole and provides a focus for assessment. Text in the performance criteria is explained here. The following variables may be present and may include, but are not limited to, the examples listed under the scope. All work is undertaken to relevant legislative requirements, where applicable.

| Variable | Scope |
|---|---|
| *Multiple viewing* | Includes top views, front and side views, and a general three dimensional view |
| *Three dimensional geometric shapes* | May include arcs and lines, spheres, cones, cylinders and boxes |

## Evidence guide

The evidence guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the unit descriptor, performance criteria, range statement and the assessment guidelines for the Metal and Engineering Training Package.

| | |
|---|---|
| **Overview of assessment requirements** | A person who demonstrates competency in this unit must be able to use CAD to create and display 3D models. Competency in this unit cannot be claimed until all prerequisites have been satisfied. |
| **Context of assessment** | This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate. |
| **Interdependent assessment** | This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with using CAD to create and display 3D models or other units requiring the exercise of the skills and knowledge covered by this unit. |
| **Method of assessment** | Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. |

Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

**Consistency of performance**

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

**Required skills**

Look for evidence that confirms skills in:

- reading and interpreting engineering specifications
- organising information
- using computer and peripherals
- using CAD program
- saving 3D modes in various file formats
- preparing drawings in plane orthogonal, isometric projection or equivalent

**Required knowledge**

Look for evidence that confirms knowledge of:

- region modelling techniques.
- solid modelling techniques
- development of sectioned models
- use of cutting plane
- use of cross hatching
- use of pre-drawn library files and primitives to produce a 3D model
- use of third level software to produce 3D models
- how to extract mass and area properties
- how to extract area properties from region models
- application of basic rendering techniques to a 3D model

# MEM9.11B Apply basic engineering design concepts

| | |
|---|---|
| **Unit descriptor** | This unit covers applying in situ design skills by personnel who are then responsible for the manufacture of the design outcome either individually or as part of a team. |
| **Prerequisites** | |
| Path 1 | 9.2 Interpret technical drawing |
| **Competency field** | Drawing, drafting & design |
| **Application of the competency** | This unit includes the determination of requirements such as location, assembly or other parts of the manufacturing or engineering process and where the designer must consider the impact of the design on other equipment, process or personnel, for example safety aspects of the design. |
| | Design tasks undertaken include the application of design concepts to, for example, the fabrication and modification of structures, plant and equipment, and design of tooling and gauges, production control systems, fluid power layouts, electrical circuits etc. |
| | The unit applies to the fields of mechanical, production, electrical/electronic, fabrication, and fluid power. |
| **Related units** | None |
| **Band** | A |
| **Unit weight** | 6 |
| **Notes** | There are no notes for this unit. |

| **Elements** | **Performance criteria** |
|---|---|
| Elements are the essential outcomes of the unit of competency. | Together, performance criteria specify the requirements for competent performance. Text in *italics* is explained in the range statement following. |
| 1 Determine design requirements | 1.1 Design requirement is established from job sheets, instructions or in consultation with appropriate people. |
| | 1.2 Design concepts are established and may include consideration of process, material, quantity, cost and outcome. |
| | 1.3 Where appropriate, codes, regulations and technical documentation are consulted to establish design limitations in accordance with standard operating procedures. |
| | 1.4 Sources of expert assistance are identified and used as required. |

| 2 Create design | 2.1 | Design meets end use requirement. |
| | 2.2 | Design meets all legislative and regulatory requirements. |
| | 2.3 | Design concept is verified in accordance with standard operating procedures. |
| | 2.4 | Design outcome is produced as per job requirements and may include sketch, drawing, prototype, document, model or finished product. |

## Range statement

The range statement provides information about the context in which the unit of competency is carried out. The variables and scope cater for different work requirements, work practices and knowledge between States, Territories and the Commonwealth, and between organisations and workplaces. The range statement relates to the unit as a whole and provides a focus for assessment. Text in italics in the performance criteria is explained here.

The following variables may be present and may include, but are not limited to, the examples listed under the scope. All work is undertaken to relevant legislative requirements, where applicable.

| **Variable** | **Scope** |
| --- | --- |

There are no variables selected for this unit.

## Evidence guide

The evidence guide specifies the evidence required to demonstrate achievement in the unit of competency as a whole. It must be read in conjunction with the unit descriptor, performance criteria, range statement and the assessment guidelines for the Metal and Engineering Training Package.

| **Overview of assessment requirements** | A person who demonstrates competency in this unit must be able to apply basic engineering design concepts. Competency in this unit cannot be claimed until all prerequisites have been satisfied. |
| --- | --- |
| **Context of assessment** | This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate. |
| **Interdependent assessment** | This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with applying basic engineering design concepts or other units requiring the exercise of the skills and knowledge covered by this unit. |
| **Method of assessment** | Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those |

required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

**Consistency of performance**

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

**Required skills**

Look for evidence that confirms skills in:

- obtaining all relevant drawings, job sheets, instructions and specifications

- consulting, where appropriate, relevant personnel as to the design requirements

- inspecting, where appropriate, the object, plant or equipment to which engineering design concepts are to be applied

- determining, where appropriate, design limitations imposed by relevant codes, standards and regulations

- where appropriate, seeking assistance from relevant sources

- verifying the design concept.

- presenting the design object in a form appropriate to the job requirements

- reading, interpreting and following information on written job instructions, specifications, standard operating procedures, charts, lists, drawings and other applicable reference documents

- checking and clarifying task related information

- planning and sequencing operations

- checking for conformance to specifications

- undertaking numerical operations, geometry and calculations/formulae within the scope of this unit

**Required knowledge**

Look for evidence that confirms knowledge of:

- design requirements

- functional requirements of the design

- the material(s) appropriate to the environment in which the object(s) to be designed is to operate

- processes to be used in the manufacture of the object(s)

- where appropriate, the costs associated with the manufacture of the object(s)
- reasons for selecting the chosen design concept
- all relevant codes, standards and regulations applying to the object to be designed
- the impact of the applicable codes, standards and regulations on the design requirements of the object
- sources of expert assistance in the design process
- the end use requirements of the design
- checks to ensure the design complies with the relevant codes, standards, legislative and regulatory requirements
- the procedures for verifying design concepts
- the means by which the design concept is to be presented
- safe work practices and procedures

# MNMMSU411A Supervise work in confined space

## Unit Descriptor

This unit applies to the implementation of a confined space management program, and supervision of personnel entering and working in a confined space.

*Links outside this unit*

- AS/NZS 2865:2001: Safe working in a confined space

| ELEMENT | | PERFORMANCE CRITERIA |
|---|---|---|
| 1. Prepare for work in the confined space | 1.1 | Plan and prepare work according to site procedures and relevant *legislation* |
| | 1.2 | Access and interpret the site *confined spaces safety management program* |
| | 1.3 | Determine tasks and access or develop Safe Operating Procedures for work to be carried out in the confined space |
| | 1.4 | Identify and implement *communications* system and equipment |
| | 1.5 | Select *Personal Protective Equipment* appropriate for work activities |
| | 1.6 | Identify and obtain resources for implementation of the *confined spaces safety management program* |
| | 1.7 | Prepare Confined Space Entry Permit and hot work permits |
| 2. Provide information about working in confined spaces | 2.1 | Establish effective consultation mechanisms with all levels of the workforce |
| | 2.2 | Consult with employees and employee representatives on implementation of the confined spaces safety management program |
| | 2.3 | Identify and meet the communication needs of special groups |
| | 2.4 | Provide information, instruction, training and supervision to employees on safe working in confined spaces |
| 3. Ensure that the safety and health of personnel entering and working in a confined space is not affected | 3.1 | Identify relevant personnel or expertise for risk assessment, and initiate hazard identification and risk assessment process of the confined space and work to be carried out |
| | 3.2 | Identify and record hazards associated with the confined space and the work to be carried out |
| | 3.3 | Assess risks relating to work in the confined space |
| | 3.4 | Identify and implement effective control measures for confined space hazards according to the *Hierarchy of Controls* |

| | | | |
|---|---|---|---|
| | | 3.5 | Develop a confined space checklist for the Confined Space Entry Permit |
| | | 3.6 | Ensure that atmospheric monitoring instruments are available or installed in the confined space, and calibrated correctly |
| | | 3.7 | Keep written records of hazard and risk assessment processes and outcomes, and the controls put in place |
| 4. | Supervise entry and work in a confined space | 4.1 | Allocate resources to confined space personnel for effective, safe performance of designated work |
| | | 4.2 | Ensure that all personnel entering the confined space read, understand and sign the Confined Space Entry Permit and hot work permits |
| | | 4.3 | Ensure that all personnel are clear on their work activities and responsibilities |
| | | 4.4 | Brief and post confined space observers and sentries |
| | | 4.5 | Check that required *Personal Protective Equipment* is worn in accordance with site practices and manufacturers' instructions |
| | | 4.6 | Ensure that communications systems are installed and maintained |
| | | 4.7 | Monitor and evaluate the continued effectiveness of risk assessment processes and controls |
| | | 4.8 | Test and maintain controls |
| | | 4.9 | Ensure that work adheres to SOPs |
| 5. | Implement confined space emergency and rescue systems | 5.1 | Select emergency rescue equipment appropriate for the confined space activities |
| | | 5.2 | Identify and liaise with external Emergency Services agencies |
| | | 5.3 | Implement site approved emergency procedures |
| | | 5.4 | Ensure that personnel are trained in emergency procedures |
| | | 5.5 | Keep and maintain emergency procedure training records |
| 6. | Withdraw from confined space and facilitate return to service | 6.1 | Ensure that confined space work is completed to site requirements and all work-related materials and equipment removed from the confined space |
| | | 6.2 | Ensure all Permits to Work are cleared and systems isolation devices removed |
| | | 6.3 | Ensure that all personnel sign off the Confined Space Entry Permit |

6.4 Advise appropriate personnel that the confined space is clear for return to service

6.5 Review the *confined space safety management program*

**RANGE STATEMENT**

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OH&S and other relevant legislation apply to all elements and performance criteria.

**Legislation** may include Acts and Regulation dealing with**:**

- mining safety and health

- mine inspection

- OH&S

- explosives

A **confined spaces safety management program** may typically cover:

- roles and responsibilities according the legislation and identification and designation of areas of responsibility

- hazard identification and risk management

- specific strategies to ensure that training and information are delivered commensurate to the position and responsibility

- procedures for safe working in confined spaces

- system for use of confined spaces entry and hot work permits

- record keeping in accordance with legislative requirements

- resourcing of appropriate confined spaces safety training

**Communications** may include:

- hand-held radio

- telephone

- mobile phone

- hand signals

- computer

- verbal instructions

- lights

**Personal protective equipment** may include:

- face and eye protection;

- head protection;

- foot protection;

- body protection;

- hearing protection;

- respiratory protection;

- hand protection

- harnesses and/or safety lines

The **Hierarchy of Controls** lists the control measures that should be implemented in priority order, including:

- elimination
- substitution
- isolation
- engineering controls
- administrative controls
- personal protective equipment

## EVIDENCE GUIDE

### Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to mine site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of all procedures, requirements and instructions to supervise work in a confined space appropriate to a mine site; and
- implementation of appropriate procedures and techniques for efficient and effective supervision of work in a confined space appropriate to a mine site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

  a   preparing for work in the confined space

  b   providing information about working in confined spaces

  c   ensuring that the safety and health of personnel entering and working in a confined space is not affected

  d   supervising entry and working in a confined space

  e   implementing confined space emergency and rescue systems

  f   withdrawing from confined space and facilitating return to service

### Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- legislation, standards and Codes of Practice as they apply to confined spaces
- definition of confined space
- responsibilities of employers and employees, designers, manufacturers, suppliers and installers in general as they apply to safe work in confined spaces
- the process of hazard identification, risk assessment and control
- workplace strategies for implementing confined space legislation
- the effects of atmospheric contaminants entering the respiratory system
- effects on the human body such as:
  - oxygen deficiency
  - toxic contaminants
  - combustible contaminants
  - physical hazards such as engulfment and entrapment
  - physiological conditions such as asthma, epilepsy, phobias and physical fitness

- risks to workers handling hazardous substances in confined spaces
- risks from electric shock, explosion or fire, temperature changes, noise, and trips, slips and falls
- relationship between work environment and systems of work
- injury record
- consultation with employees and employee representative
- control measures and the Hierarchy of Controls
- methods of systems isolation
- Safe Operating Procedures
- examination, testing and maintenance of control measures
- emergency procedures in confined spaces
- selection, use, training and maintenance of safety and rescue equipment
- implementation of emergency rescue procedures
- consultation techniques
- communication and observer system
- record keeping

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- access, interpret and apply technical and safety information
- communicate and coordinate activities with others
- keep plant and equipment records
- apply diagnostic/faultfinding techniques
- comply with environmental requirements
- work at heights
- task analysis
- measure atmospheric contaminants
- apply First Aid
- apply fire fighting techniques
- negotiate with employers and employees
- provide information, instruction, training and supervision on safe working in a confined space

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific mine site requirements.

## Resource Implications

Assessment of this competency requires typical resources normally used in a mine-site work environment. Selection and use of resources for particular mine sites may differ due to mine site conditions, equipment availability, equipment/plant types and different contexts.

### Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence required to demonstrate the competency.

### Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

### Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- workplace observation of processes and procedures

- oral and/or written questioning on required knowledge

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- simulation and/or scenario analysis

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in a manner appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

### Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1. Perform the process/task

Level 2. Perform and administer the process/task

Level 3. Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Key Competency | Example of Application | Performance Level |
|---|---|---|
| Collect, analyse and organise information | To access and interpret the site confined spaces safety management program. | 2 |
| Communicate ideas and information | To develop a confined space checklist for the Confined Space Entry Permit. | 2 |
| Plan and organise activities | To determine tasks and access or develop Safe Operating Procedures for work to be carried out in the confined space | 2 |
| Work with others and in teams | To consult with employees and employee representatives on implementation of the confined spaces safety management program. | 2 |
| Use mathematical ideas and techniques | To ensure that atmospheric monitoring instruments are calibrated correctly. | 2 |
| Solve problems | To identify and implement effective control measures for confined space hazards. | 2 |
| Use technology | To test and maintain controls. | 2 |

## MNQGEN300A Apply risk management processes

### Unit Descriptor

This unit covers the application of the processes and tasks to conduct inspections and to identify, analyse, assess risks, recommend treatment, contribute to implementation of treatments and to monitor risks. It also covers participation in the preparation, testing and documentation of site working instructions or equivalent.
This unit has been developed from the Queensland Mining S1 unit of competency.

### *Links outside this unit*

The work described in this unit is equivalent to the work covered in:

- MNCG1001A Apply risk management processes

The work covered in this unit relates to the Australian Standard AS/NZS 4360:1999 — Risk Management.

| ELEMENT | | PERFORMANCE CRITERIA |
|---|---|---|
| 1. Identify hazards. | 1.1 | Inspect and analyse work area conditions regularly and systematically to identify/recognise potential hazards. |
| | 1.2 | Access and analyse relevant *work site risk management systems information* to eliminate situations covered by existing and adequate procedures. |
| | 1.3 | Recognise the type and scope of uncontrolled hazards and their likely impact. |
| 2. Assess and identify unacceptable risk. | 2.1 | Consider and determine the likelihood of the event happening. |
| | 2.2 | Evaluate and determine the consequence if the event should occur. |
| | 2.3 | Consider and determine the risk level (likelihood and consequence combined). |
| | 2.4 | Identify or source the *criteria* for determining the acceptability/unacceptability of the risk from the appropriate party. |
| | 2.5 | Evaluate the *risk* against criteria to identify if it warrants '*unacceptable risk'* status and the refer the findings to the appropriate person |
| 3. Identify and recommend treatments. | 3.1 | Identify the range of actions/*treatments*, which may eliminate or minimise the risk. |
| | 3.2 | Identify and consider the possible options for resolution of the problem/dealing with the risk. |
| | 3.3 | Identify feasible options by preliminary analysis and testing of possible options. |
| | 3.4 | Conduct a detailed analysis of feasible options including the identification of *resource requirements*. |
| | 3.5 | Select the most appropriate action/treatment for |

dealing with the situation.

| | | | |
|---|---|---|---|
| 4. | Contribute to the implementation of treatments. | 4.1 | Plan selected action/treatment in detail including the identification of resource requirements. |
| | | 4.2 | Gain authorisation for selected action/treatment in accordance with site requirements. |
| | | 4.3 | Review, prepare, test and document site working instructions (or equivalent) for the job. |
| | | 4.4 | *Communicate* information on the action/treatment and its implementation to the relevant people. |
| 5. | Review safety system documentation. | 5.1 | Monitor and review site working instructions (or equivalent) for *compliance with statutory and site requirements*. |
| | | 5.2 | Action amendments to the site working instructions (or equivalent) or refer the matter to the appropriate party for follow up. |

## RANGE STATEMENT

The following range of variables is subject to site specific operations, but are not limited to the following details. Site procedures, regulations and OHS and other relevant legislation applies to all elements and performance.

**Risk management processes** may be undertaken at any mining site. They may involve the members of work groups, teams and management committees, and involve agencies and individuals external to the work site.

**Hazard** is defined as *a source of potential harm or a situation with a potential to cause loss.*

**Risk** is defined as *the chance of something happening that will have an impact upon objectives. It is measured in terms of consequences and likelihood.*

**Likelihood** is used as a qualitative description of probability and frequency.

**Probability** is defined as *the likelihood of a specific outcome, measured by the ratio of specific outcomes to the total number of possible outcomes. Probability is expressed as a number between 0 and 1, with 0 indicating an impossible outcome and 1 indicating an outcome is certain.*

**Consequence** is defined as *the outcome of an event of situation expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain.*

**Criteria for the acceptability/unacceptability of the risk** must be determined by the organisation's internal policy, goals and/or objectives.

**Risk management processes and measures** may include those focused on:

- personal safety (e.g. personal protective equipment, medical standards, drug and alcohol, stress management and evacuation)
- equipment and machinery isolation
- protection and guarding
- hazard identification and monitoring
- chemical safety
- fire safety

- other potential emergency related circumstances.

**Site risk management systems information** may include:

- applicable commonwealth/state/territory legislation and codes of practice relating to the industry, dangerous and hazardous goods, environmental protection and safety and health
- work site safety and/or environmental management systems
- manufacturers' documentation and handbooks
- workplace operating procedures and policies
- material safety data sheets
- emergency procedures.

**Statutory/legal compliance** may include:

- common law
- dangerous goods
- development of training policies/programs to aid compliance
- mining legislation
- trade practices
- waterways
- weights and measures
- workers compensation/WorkCover
- requirements for the maintenance of records for statutory/legal breaches
- provision of information and training
- regulations and codes of practice relating to statutory/legal compliance
- site representatives and committees
- issue resolution.

**Acceptable risk criteria**:

The organisation's internal policy, goals and/or objectives must determine the criteria for acceptable risk.

**Types of risks** may involve:

- equipment
- methods/plans
- competencies
- the work environment.

**Treatments** may include option type sin sequence such as:

- eliminating the hazard
- substitution
- engineering controls
- administrative controls (procedures, etc.)
- personal protective equipment.

**Resources** may include:

- people
- finance
- equipment
- environment
- buildings/facilities
- technology
- information.

**Consultation** may include:

- regulatory authorities
- tenderers
- project managers
- contractors
- employees
- customers
- suppliers.

**Records and reports** may include:

- a full report including Objective, Method, Results and Recommendations
- risk assessment forms
- action planning documents.

**Communications** may be:

- face to face
- in writing
- by telephone or by other electronic means
- formal
- informal.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions for risk management processes on a work site

- implementation of appropriate procedures and techniques for the efficient and effective risk management on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements

- ability to transfer risk assessment processes to changing circumstances and to respond to unusual circumstances in the critical aspects of:
    a. conducting inspections

b. identifying hazards

c. assessing and identifying unacceptable risk

d. identifying and recommending treatments

e. contribution to the implementation of treatments

f. reviewing safety system documentation.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events.

In order to determine the level of underpinning knowledge required, the following definitions are to be applied:

*General Knowledge.* An outline knowledge sufficient to identify the major features /issues and to be able to locate, access and interpret further information on commonly encountered or targeted topics.

*Knowledge.* A level of knowledge and understanding which supports the recall and application of information in a work situation. Normally related to site specific systems, processes, procedures and facts.

Assessment requires evidence of the ability to identify and explain the purpose of:

- mining legislation and regulations

- mining legislation and regulations

- appropriate mining context and language

- topics or subject areas which are target for assessment and treatment

- site risk management systems and their application

- conventions and requirements for written communications including report writing.

# Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- research and use interpretative skills to locate, interpret, analyse and apply relevant operational information

- demonstrate technical literacy and communication skills sufficient to interpret and apply common industry terminology, and interpret work procedures and processes

- use plain English speaking and communication skills in relation to oral communications with supervisors and other employees

- apply questioning and active listening skills, for example when obtaining information of technical working practices

- demonstrate writing skills to allow effective report writing

- apply planning and organising skills sufficient to prepare for and apply the risk management processes covered in this unit

- demonstrate teamwork skills sufficient to involve and engage the employers/supervisors in the risk management processes

- apply problem solving skills to assess technical mining issues.

### Assessment and Interdependence of Units
This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

### Prerequisite Units
There are no prerequisite units for this unit.

### Resource Implications
Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

### Consistency in Performance
To ensure consistency of performance, this unit may be assessed over a period of time and in a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

### Context for Assessment
This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

### Methods of Assessment
Appropriate methods of assessment for this unit will usually include:
- observation of risk management processes and procedures
- oral and/or written questioning on required knowledge and skills
- testimony from supervisors, colleagues, clients and/or other appropriate persons
- inspection of the final product or outcome.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

### Key Competencies
There are a number of basic skills, which enable people to transfer and apply knowledge and skills developed to the workplace. There are three levels at which these Key Competencies can be applied:

Level 1.   Perform the process/task
Level 2.   Perform and administer the process/task
Level 3.   Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed on the following page:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 2 | 1 | 2 | 1 |

Examples of application include:

- **Collecting, analysing and organising information —** to determine the level of risk.
- **Communicating ideas and information —** to inform relevant people on risk action/treatment.
- **Planing and organising activities —** to inspect work area conditions regularly and systematically to identify hazards.
- **Working with teams and others —** to engage in the risk management process.
- **Using mathematical ideas and techniques** — to assess risk.
- **Solving problems —** to select the most appropriate action/treatment to minimise risk.
- **Using technology —** to communicate actions in minimising risk.

## MNQGEN340A Communicate information

### Unit Descriptor

This unit covers the function required to effectively *communicate* information with other persons in the Mining industry. This includes communicating verbally, communicating in written and report form, participating in meetings, making presentations, and participating in operational level negotiations.

This unit is a new unit developed from the Queensland Mining S3 unit of competency.

### *Links outside this unit*

The work described in this unit is equivalent to the work covered in:

- MNCG1009A Communicate information

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Communicate information orally. | 1.1 | Analyse and clarify the purpose of the oral communication is with the other parties. |
| | | 1.2 | Adopt a suitable oral communication style to match the communication purpose and audience. |
| | | 1.3 | Deliver oral information that given to others is clearly, succinctly and unambiguously. |
| | | 1.4 | Check the received information with the listener(s) to ensure it has been received accurately and understood where oral information has been given to others. |
| | | 1.5 | Listen carefully and intently to oral information that is received from others. |
| | | 1.6 | Check the meaning with the speaker where oral information has been received from others, to ensure that it has been received accurately and understood. |
| 2. | Communicate information in writing. | 2.1 | Analyse and confirm the purpose or objective of the *written communication*. |
| | | 2.2 | Format and present the document according to current industry and enterprise practice. |
| | | 2.3 | Organise the document logically and so it is structured and balanced according to the purpose, audience and context. |
| | | 2.4 | Ensure the written language is applicable to the communication purpose and audience. |
| | | 2.5 | Ensure the written information is clear, succinct and unambiguous. |
| | | 2.6 | Ensure conclusions reached are logically justified and reflect the purpose of the written communication. |
| | | 2.7 | Complete preparation within any specified time frame and the process communication to industry and work site requirements. |
| 3. | Achieve meeting outcomes. | 3.1 | *Prepare for the meeting* to cover all requirements in a timely and effective manner. |
| | | 3.2 | Clarify the purpose of a meeting with all of those participating. |

|   |   |   |   |
|---|---|---|---|
| | | 3.3 | *Conduct the meeting* effectively in accordance with industry and work site conventions and rules of procedure. |
| | | 3.4 | *Record* accurately the outcomes of a meeting and official promptly provide minutes of the meeting to all participants. |
| | | 3.4 | Document accurately all required action flowing from decisions reached at a meeting. |
| | | 3.5 | Notify promptly persons responsible for implementing action from decisions at a meeting and confirm in writing details of the required action. |
| | | 3.6 | Take appropriate follow-up action to ensure that all decisions of a meeting are acted upon as required. |
| 4. | Make a presentation. | 4.1 | Identify and clarify the purpose of a presentation and where appropriate, confirm with the intended audience. |
| | | 4.2 | Organise the information to be communicated in a presentation and structure it in accordance with contemporary presentation techniques and practice. |
| | | 4.3 | Identify, evaluate and select the media *resources* available to use for the presentation. |
| | | 4.4 | Organise and prepare presentation *aids* in advance, in accordance with recognised standards of good practice. |
| | | 4.5 | Check resources and presentation aids where possible prior to the presentation to ensure that they are functioning properly. |
| | | 4.6 | Make the presentation as planned with appropriate response to the reactions and feedback provided by the audience. |
| | | 4.7 | Evaluate the outcomes of the presentation and act upon the findings in accordance with work site systems and procedures. |
| 5. | Participate in negotiations. | 5.1 | Make adequate *preparation for the negotiation* in accordance with work site procedures. |
| | | 5.2 | Select a suitable negotiation strategy in accordance with the relevant requirements, including the location, time and approach to be taken. |
| | | 5.3 | Conduct negotiations in accordance with the planned approach. |
| | | 5.4 | Review negotiation outcomes in terms of desired outcomes of the parties and initiate suitable further action, if required, according to legislative and work site requirements. |
| | | 5.5 | Carry out all required follow-up action to the negotiations, including further discussions with the parties if necessary. |

5.6 Document outcomes of the negotiation in accordance with legislative and work site requirements.

**RANGE STATEMENT**
The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Communication** may be:

- face to face
- in writing
- by telephone
- by electronic means
- formal/informal.

**Meeting preparation** may include:

- arrangements for the venue
- issue of the notice of meeting to attendees and other interested parties
- circulation of agenda and other papers
- arrangements for visiting speakers
- venue set up on the day.

**Meeting conduct** may include:

- the handling of apologies
- minutes
- motions
- discussion
- voting
- recording of outcomes according to industry
- work site conventions and rules of procedure.

**Presentation resources** may include:

- the hardware aspects of projectors
- computers
- screens
- telecommunications equipment
- audio/visual equipment.

**Presentation aids** may include:

- overhead transparencies
- slides
- computer software materials
- presentation notes

- hand-outs
- computer disks
- videos.

**Negotiation preparation** may include:

- full consideration of the subject matter
- the significance of the outcomes for the parties involved
- the facts
- the issues and options
- the perceived/anticipated positions of the parties involved.

**Written communication** may be prepared and stored in hard copy or electronic form and may include:

- memos
- letters
- reports.

# EVIDENCE GUIDE

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to communicate information on a work site

- implementation of appropriate procedures and techniques for the efficient and effective communication on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements

- ability to transfer communication processes to changing circumstances and to respond to unusual circumstances in the critical aspects of:

  a. conducting oral communication in the workplace

  b. communicating in writing

  c. achieving meeting outcomes

  d. conducting presentations

  e. negotiating issues in the workplace.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events.

In order to determine the level of underpinning knowledge required, the following definitions are to be applied:

*General Knowledge.* An outline knowledge sufficient to identify the major features/ issues and to be able to locate, access and interpret further information on commonly encountered or targeted topics.

*Knowledge*. A level of knowledge and understanding which supports the recall and application of information in a work situation. Normally related to site specific systems, processes, procedures and facts.
Assessment requires evidence of the ability to identify and explain the purpose of:

- mining legislation and regulations

- the theory of industry based communication requirements and systems

- the topic or subject area which is the target for the communication

- the factors for effective oral communication

- the site conventions and requirements for written communications including report writing

- meeting procedures and follow-up requirements

- preparing for and conducting a presentation

- basic negotiating techniques and their application.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- research and interpretative skills to locate, interpret and apply relevant operational information

- technical literacy and communication skills sufficient to interpret and apply common industry terminology, and interpret work procedures and processes

- plain English speaking and communication skills in relation to oral communications with supervisors and other employees both informally and in making formal presentations

- questioning and active listening skills, for example when obtaining information of technical working practices

- writing skills to allow effective written communications in the workplace

- effective listening and interpersonal skills to enable effective communication in meetings and negotiations

- planning and organising skills sufficient to prepare and manage communication processes covered in this unit

- teamwork skills sufficient to involve and engage the employers/supervisors in the communication processes
- problem solving skills to assess technical mining issues.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the jobs.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures
- oral and/or written questioning on required knowledge and skills
- testimony from supervisors, colleagues, clients, other appropriate persons
- inspection of the final product or outcome
- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills, which enable people to transfer and apply knowledge and skills developed to the workplace. These skills are commonly referred to as the Key Competencies. Key Competencies are applied at three levels:

Level 1.    Perform the process/task
Level 2.    Perform and administer the process/task
Level 3.    Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|:---:|:---:|:---:|:---:|:---:|:---:|:---:|
| 2 | 2 | 2 | 2 | 1 | 2 | 1 |

Examples of application include:

- **Collecting, analysing and organising information** — to communicate effectively.

- **Communicating ideas and information** — to ensure understanding.

- **Planning and organising activities** — to communicate clearly succinctly and unambiguously.

- **Working with teams and others** — to communicate ideas.

- **Using mathematical ideas and techniques** — to enhance communications.

- **Solving problems** — by communicating accurate information.

- **Using technology** — to enhance communications.

# MNQGEN400A Apply site risk management system

**Unit Descriptor**

This unit covers the *risk management* responsibilities of an employee with supervisory responsibilities on a work site. It includes the requirements for: providing information to work groups; applying and monitoring participative arrangements, providing risk training, identifying hazards, assessing risks, controlling risks and the maintaining of risk management records.

*Unit Replaced*

- This unit replaces part of the unit MNQTL02 Implement monitor and report on the site risk management processes associated with occupational health and safety and environment.

*Links outside this unit*

The work covered in this unit is relevant to AS/NZS 4360:1999 Risk Management.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1. Provide information to the work group. | 1.1 Accurately explain *relevant provisions of legislation* and codes of practice to the work group. |
| | 1.2 Provide information on the *organisation's risk management policies, procedures and programs* to the work group in a readily accessible manner. |
| | 1.3 Regularly provide and clearly explain information about *identified hazards* and the outcomes of *risk assessment* and control to the group. |
| 2. Apply and monitor participative arrangements. | 2.1 Explain the importance of effective consultative mechanisms in managing risk. |
| | 2.2 Conduct and monitor consultative procedures to facilitate participation of work groups in managing work area hazards. |
| | 2.3 Promptly deal with issues raised through consultation in accordance with *organisational consultation procedures.* |
| | 2.4 Record and promptly communicate the outcomes of consultation over risk management issues to the work group. |
| 3. Apply and monitor the procedures for providing training. | 3.1 Systematically identify risk management training needs in line with organisational requirements. |
| | 3.2 Make arrangements, in consultation with relevant individuals, to meet risk management training needs of team members. |
| | 3.3 Provide workplace learning opportunities and coaching and mentoring assistance to facilitate team and individual achievement of identified training needs. |
| | 3.4 Identify and report costs associated with provision of training for work team for inclusion in financial planning. |

| | | | |
|---|---|---|---|
| 4. | Apply and monitor procedures for identifying hazards and assessing risks. | 4.1 | Identify and report *hazards and risks* in the work area in accordance with risk management and related policies and procedures. |
| | | 4.2 | Action team members hazard reports promptly in accordance with organisational procedures. |
| 5. | Apply and monitor the procedures for controlling risks. | 5.1 | Apply procedures for *controlling risk* using the hierarchy of controls and organisational requirements. |
| | | 5.2 | Identify and report inadequacies in existing risk control measures in accordance with hierarchy of controls. |
| | | 5.3 | Monitor outcomes of reported inadequacies where appropriate to ensure a prompt organisational response. |
| 6. | Apply and monitor the procedures for maintaining records. | 6.1 | Ensure accurately completion and maintenance of r*isk management records* of incidents in the work area in accordance with organisational requirements. |
| | | 6.2 | Use aggregate information and data from work area records to identify hazards and monitor risk control procedures in work area. |

## RANGE STATEMENT

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Risk** is the chance of something happening that will have an impact upon objectives. It is measured in terms of consequence and likelihood.

**Risk management** is the culture, processes and structure that are directed towards the effective management of potential opportunities and adverse risk.

**Risk management** may be applied to:

- statutory compliance
- OHS
- environment
- quality
- property security
- business risks, such as:
  - credit management
  - capital expenditure
  - sales and marketing
  - finance and accounting.

**Relevant legislation and codes of practice** may include:

- award and enterprise agreements and relevant industrial instruments
- relevant legislation, regulations and permits from all levels of government that affects business operations, such as:

- OHS
- environmental
- development consents
- trade practices and consumer protection
- equal opportunity
- industrial relations
- anti-discrimination

- common law duty of care
- relevant industry codes of practice.

**The policy** is the statement of over all intent and direction of the organisation in respect of the specific area of managerial responsibility.

**Organisation's Risk Management policies and procedures** may include:

- risk management policy
- site procedures and work instructions for hazard identification
- site procedures and work instructions for risk assessment, selection and implementing of risk control measures
- site incident (accident) investigation requirements
- site risk audits and investigations requirements
- site consultative arrangements for employees in work area
- site hazard report procedures
- site operating procedures and instructions
- site emergency and evacuation procedures
- site purchasing policies and procedures
- site plant and equipment maintenance and use instructions
- site hazardous substances use and storage procedures and work instructions
- site dangerous goods transport and storage procedures and work instructions
- site OHS arrangements for on site contractors, visitors and members of the public
- site First Aid provisions/medical practitioner contacts and attention instructions
- site access procedures and instructions.

**Hazard** is a source of potential harm or a situation with a potential to cause loss.

**Risk identification** is the process of determining what can happen, why and how.

**Risk assessment** is the overall process of risk analysis and risk evaluation.

**Risk analysis** is a systematic use of available information to determine how often specified events may occur and the magnitude of their likely consequences.

**Risk evaluation** is the process used to determine risk management priorities by comparing the level of risk against predetermined standards, target risk levels or other criteria.

**Risk treatment** is the selection and implementation of appropriate options for dealing with risk.

**Risk management processes** are the systematic application of management policies, procedures and practices to the task of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risk.

**Consultation** would typically include:

- regulatory authorities
- tenderers
- project managers
- contractors
- employees
- community
- customers
- suppliers.

**Monitor** is to check, supervise, observe critically, or record the progress of an activity, action or system on a regular basis in order to identify change.

**Identifying hazards and assessing risk** may occur through activities such as:

- workplace inspections in area of responsibility
- consulting work team members
- housekeeping
- risk audits and review of audit reports
- daily informal employee consultation and regular formal employee meetings
- checking equipment before and during work
- review of health, safety, environmental, quality and other risk related records.

**Organisational consultation procedures** may include:

- formal and informal meetings
- health and safety committees
- other committees, such as, planning and purchasing
- involvement of employees in management and planning meetings
- early response to employee suggestions, requests, reports and concerns put forward to management
- counselling/disciplinary processes.

**Procedures for controlling risk** may include:

- removing the cause of the risk at its source (eliminating the hazard)
- selecting control measures in accordance with the hierarchy (i.e. work through the hierarchy from most effective to least effective)
- job/process/workplace re-design
- consultation with employees and their representatives.

**Risk management** records may include:

- audit and inspection reports

- hazard registers

- risk analysis records

- risk treatment reports

- minutes of meetings (risk management, OHS, environmental etc)

- induction, instruction, training and assessment

- manufacturer's and supplier's information

- dangerous goods and hazardous substances registers

- plant and equipment maintenance and testing reports

- workers compensation and rehabilitation records

- First Aid/medical records

- major incident and emergency response instructions

- emergency contact lists

- financial records

- contract documents.

## EVIDENCE GUIDE

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to *work site* operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge procedures, requirements and instructions to apply the site risk management system on a work site

- implementation of procedures and techniques for the efficient and effective application of the site risk management system on a work site, while complying with site health, safety, environmental, quality and communication requirements. This will include:

   a. apply the site's management systems and procedures to risk management in the work site

   b. identify and comply with risk management legal and organisational requirements

   c. apply site procedures to identify hazards in the workplace

   d. apply site procedures for assessment and control of risk associated with those hazards in accordance with the hierarchy of control

   e. provide specific clear and accurate information and advice on workplace hazards to work group

   f. provide appropriate supervision of work group.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts

and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- relevant legislation from all levels of government that effect business operations, especially as they apply to OHS, the environment, development, trade practices, consumer protection, financial failure, damage to property and equipment, anti-discrimination, employment, industrial relations, professional incompetence

- legal responsibilities of employers, supervisors and employees in the workplace

- site policies and procedures relating to hazard management, fire emergency, evacuation, incident and accident investigation and reporting

- relevance of consultation as a key mechanism for improving workplace risk management

- principles and practices of risk management

- characteristics and composition of the workgroup.

## Required Skills

Specific skills are required to achieve the performance criteria of this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- analyse skills to identify hazards and assess risks in the work area

- data analysis skills including:
  - incident monitoring
  - environmental monitoring
  - evaluation of effectiveness of risk control measures

- assessment skills to assess resources required to apply risk control measures

- literacy skills for comprehending documentation and interpreting risk management requirements

- coaching and mentoring skills to provide support to colleagues

- ability to relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities.

## Concurrent Assessment and Interdependence of Units

This unit may be assessed with other relevant units according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources in the work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance this unit may be assessed over a period of time and a range of work site conditions. Local site factors will influence the breadth of evidence required to demonstrate the competency. .

**Context for Assessment**

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Method of assessment

Appropriate methods of assessment for this unit will usually include:

- observation of process and procedures

- oral and/or written questioning of required knowledge and skills

- testimony from supervisors, colleagues, clients and or other appropriate persons

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

        Level 1.     Perform the process/task

        Level 2.     Perform and administer the process/task

        Level 3.     Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to obtain information and advise colleagues of risk management responsibilities.

- **Communicating ideas and information** — to resolve risk management issues with work team.

- **Planning and organising activities** — to plan resource requirements.

- **Working with teams and others** — to consult on and control risk.

- **Using mathematical ideas and techniques** — to calculate resource requirements.

- **Solving problems** — to investigate improved work methods.

- **Using technology** — to use information systems to access risk management information.

# MNQGEN401A Apply site statutory compliance management plan

## Unit Descriptor

This unit covers the statutory compliance responsibilities of an employee with supervisory responsibilities in a work site operation. It includes the requirements for: accessing and sharing legislation, codes and standards with site personnel; planning and implementing requirements; and monitoring, adjusting and reporting performance.

### Units Replaced

- This unit replaces the unit MNQTL01A Implement, monitor, rectify and report statutory/legal compliance.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Access and share legislation, codes and standards. | 1.1 | Make available the *legislation, standards and the organisation's policies and practices* relevant to the creation and maintenance of workplace statutory/legal compliance to individuals/teams. |
| | | 1.2 | Provide information in a language, style and format which is understood by colleagues. |
| | | 1.3 | Make clear the implication of non-conformance to all within the workplace. |
| 2. | Plan and implement requirement. | 2.1 | Plan work practices with colleagues to ensure *compliance with legislation and standards for workplaces.* |
| | | 2.2 | Implement work practices in accordance with work requirements specified in legislation and standards for workplaces. |
| | | 2.3 | Identify training needs and implement training, coaching and mentoring support to colleagues in managing their rights and responsibilities. |
| 3. | Monitor, adjust and report performance. | 3.1 | Identify, rectify and report actual and potential problems promptly and decisively to ensure workplace compliance. |
| | | 3.2 | Manage activities so that potential non-compliance is minimised. |
| | | 3.3 | Submit recommendations on improvements to comply with legislation and associated standards to designated persons/groups. |
| | | 3.4 | Inform individuals/teams of the results of improvements in the workplace. |
| | | 3.5 | Maintain systems, records and reporting procedures according to legislative requirements and enterprise policies. |

## RANGE STATEMENT

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Legislation, standards and the organisation's policies and practices** may include:

- trade practices
- weights and measures
- waterways
- workers compensation/WorkCover
- planning and assessment
- local government
- minerals and extractive industry licensing
- industrial relations
- navigation
- mines act
- common law (including duty of care)
- dangerous goods.

**Compliance with legislation and standards for workplaces** will particularly include:

- requirements for the maintenance and confidentiality of records of non-compliance
- requirements for the maintenance of records of breaches
- provision of information and training
- regulations and codes of practice relating to hazards present in work area
- site/work/groups representatives and committees
- issue resolution.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to apply the statutory compliance system on a work site
- implementation of appropriate procedures and techniques for the efficient and effective application of the site statutory compliance system on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

  a. demonstrating an understanding and commitment to ensuring statutory compliance is applied on the site

  b. having clear documented plans and work instructions for the implementation of the statutory compliance requirements

  c. clear documentation of monitoring, adjusting, investigating and reporting on performance of the site statutory compliance system.

## Required Knowledge
Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:
- human resource management
- statutory/legal control
- work procedure/instruction writing
- OHS auditing
- company policy.

## Required Skills
Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:
- develop and introduce practices to improve the work environment
- use effective consultative mechanisms to negotiate processes and procedures appropriate to statutory/legal requirements
- explain complex information to superiors/subordinates
- provide coaching and mentoring support.

## Assessment and Interdependence of Units
This unit may be assessed with other relevant units according to specific work site requirements.

## Prerequisite Units
There are no prerequisite units for this unit.

## Resource Implications
Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance
To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment
This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.
All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.
The assessment environment should not disadvantage the participant. For example: language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment
Appropriate methods of assessment for this unit will usually include:
- observation of processes and procedures
- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.
Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.
Assessment should also reinforce the integration of the key competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.  Perform the process/task

Level 2.  Perform and administer the process/task
Level 3.  Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to obtain information and advise colleagues of statutory compliance responsibilities.

- **Communicating ideas and information** — to resolve statutory compliance issues with work team.

- **Planning and organising activities** — to plan training requirements.

- **Working with teams and others** — to consult on and control statutory compliance.

- **Using mathematical ideas and techniques** — to calculate resource requirements.

- **Solving problems** — to investigate non-conformance.

- **Using technology** — to use information systems to access statutory compliance information.

# MNQGEN403A Foster positive community relations

## Unit Descriptor

This unit covers the fostering positive community relations through effective two-way communications with the community and promoting a positive public image.

### Links outside this unit

The work described in this unit covers some of the work described in:

- PUACOM005A Foster a positive organisational image in the community

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Promote the organisation in the community. | 1.1 | *Respond* to *community* requests for *information* or participation in accordance with the organisation's policies and procedures. |
| | | 1.2 | Act on *opportunities to explain and promote* the organisation's *activities to promote community recognition and support*. |
| | | 1.3 | Refer non-routine requests for information to *appropriate person*. |
| 2. | Represent the organisation in the community. | 2.1 | Represent the organisation's position on particular issues in a way that acknowledges *community* concerns and promotes community awareness. |
| | | 2.2 | Enhance the organisation's public image through communication and presentations to the public. |

## RANGE STATEMENT

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Responses** may include:

- referral
- provide action
- details of where to access further information.

**Community** may include:

- local community
- business community
- persons with a range of ages
- persons from culturally and linguistically diverse backgrounds
- persons with disabilities.

**Information** may include:

- how to participate
- publicity material
- contact information.

**Opportunities to explain and promote** may include:

- answering general enquiries

- addressing negative community opinion

- presentations at community group gatherings

- special interest forums

- community events and festivals

- participation in conferences

- representing organisation on associations and committees

- school visits

- media (where media access is permitted), including:

    - advertising

    - news articles.

**Activities to promote community recognition and support** may include:

- career promotions

- local shows

- ceremonies

- organisation specific weeks and regular state/national events

- shopping mall promotions.

**Appropriate person** may include:

- more senior personnel

- personnel with specific expertise

- community liaison officer

- other organisation

- bilingual.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to foster positive community relations for mining operations

- implementation of appropriate procedures and techniques for the efficient and effective fostering of positive community relations for mining operations, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

    a. sourcing, preparation, issue and explaining of information on the operations that reflects the requirements of the organisation's policies and procedures on community relations and are capable of gaining community support

    b. preparing and presenting information relevant to and for delivery to various community groups

    c. improvement in the recognition and acceptance of the operation by the community.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- organisation policies and procedures relevant to the provision of advice and information
- availability of organisation's and/or industry information and/or promotional material
- legislative responsibilities relevant to provision of information
- organisation's position on current issues
- community issues and organisations
- community activities that could be used to promote the organisation
- risk assessment requirements prior to community site visits
- insurance policy requirements for community site visits
- site staff briefing requirements prior to community site visits
- relevant recording procedures.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- apply a range of presentation strategies and techniques
- communicate with a wide variety of people
- brief site staff
- listen to questions
- interpret comments
- evaluate activities

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency. Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example: language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies which can be applied at:

Level 1.    Perform the process/task
Level 2.    Perform and administer the process/task
Level 3.    Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 2 | 1 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to prepare information to respond to enquiries or make presentations to individuals or groups.

- **Communicating ideas and information** — to provide information and/or promote the operation.

- **Planning and organising activities** — to conduct information or promotional activities or site visits.

- **Working with teams and others** — to organise and conduct site visits by schools or community groups.

- **Using mathematical ideas and techniques** — to prepare data for presentation to community representatives or groups.

- **Solving problems** — to overcome sensitive issues.

- **Using technology** — to prepare and deliver information and presentations.

# MNQGEN404A Supervise dust and noise control

## Unit Descriptor

This unit covers the dust and noise control responsibilities of an employee with supervisory roles. It includes the requirements for: accessing and sharing legislation, codes and standards with site personnel; planning and implementing requirements; and monitoring, adjusting and reporting performance.

| ELEMENT | | PERFORMANCE CRITERIA |
|---|---|---|
| 1. Access and share requirements and procedures. | 1.1 | Access and share with team members the *legislative, organisation and manufacturer's requirements and procedures* relevant to controlling dust and noise on the site. |
| | 1.2 | Provide information in a language, style and format that is understood by colleagues. |
| | 1.3 | Make clear the health and environmental implication of non-conformance to all within the workplace. |
| 2. Plan and implement site requirement. | 2.1 | Plan *control measures* and *work practices* with colleagues to ensure compliance with *legislative, organisation and manufacturer's requirements and procedures.* |
| | 2.2 | Implement *control measures and work practices* to ensure compliance with *legislative, organisation and manufacturer's requirements and procedures.* |
| | 2.3 | Plan and implement *dust and noise monitoring* in compliance with *legislative, organisation and manufacturer's requirements and procedures*. |
| | 2.4 | Identify training needs and implement training, coaching and mentoring support to colleagues in applying the work and requirements for dust and noise control. |
| 3. Monitor, adjust and report performance. | 3.1 | Identify, rectify and report actual and potential dust and noise problems promptly and decisively to ensure workplace compliance. |
| | 3.2 | Manage activities so that potential non-compliance with dust and noise control requirements are minimised. |
| | 3.3 | Submit recommendations on improvements in dust and noise control to designated persons/groups. |
| | 3.4 | Inform individuals/teams of the results of improvements in dust and noise control in the workplace. |
| | 3.5 | Maintain systems, records and reporting procedures according to *legislative, organisation and manufacturer's requirements and procedures*. |

## RANGE STATEMENT

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Legislative, organisation and manufacturer's requirements and procedures** may include:

- risk management
- statutory compliance
- OHS
- environmental
- training
- communications
- purchasing
- contract management
- administration (including records and reports)
- maintenance, servicing, lubricating and housekeeping.

**Control measures** may include:

- dust extraction and collection
- noise insulation
- enclosures
- installing and maintaining seals
- water sprays
- water carts
- application of chemical dust suppression
- stockpile design
- bund walls/wind breaks
- routine maintenance
- personal protection equipment
- maintenance and replacement of non-compliant equipment.

**Work practices** may be included in site work instructions or standard operating procedures.

**Dust and noise monitoring** may include:

- health monitoring, such as:
  - noise exposure
  - respirable dust
  - irrespirable dust
- health screening, such as:
  - pre-employment
  - in employment

- on exit of employment

- environmental monitoring, such as:
    - deposition rates
    - noise levels
    - wind speed and direction
    - types of dust.

# EVIDENCE GUIDE

Assessment must be carried out in accordance with the endorsed Assessment Guidelines in the Extractive Industries Training Package (MNQ03).

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to apply the dust and noise avoidance and control on a work site

- implementation of appropriate procedures and techniques for the efficient and effective application of the site dust and noise control on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
    a. demonstrating an understanding and commitment to ensuring dust and noise control is applied on the site

    b. having clear documented plans and work instructions for the implementation of the dust and noise control requirements

    c. clear documentation of monitoring, adjusting, investigating and reporting on performance of the site dust and noise control system.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- legislative, requirements and procedures

- organisation's requirements and procedures

- manufacturer's requirements and procedures

- identification of harmful dust and noise levels that effect human health

- health and environmental implication of non-conformance

- potential dust and noise problems

- dust and noise control measures

- dust and noise monitoring requirements and procedures

- work practices that minimise the potential and impact of dust and noise problems

- procedures for identifying training needs and implement training

- recording and reporting procedures

- human resource management

- providing information

- work procedure/instruction writing.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- provide information

- identify potential dust and noise problems

- prepare work procedure/instructions

- develop and introduce practices to improve the work environment

- use effective consultative mechanisms to negotiate processes and procedures appropriate to statutory/legal requirements.

- explain complex information to superiors/subordinates

- provide coaching and mentoring support.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the key competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1. Perform the process/task

Level 2. Perform and administer the process/task

Level 3. Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to obtain information and advise colleagues of dust and noise control responsibilities.

- **Communicating ideas and information** — to resolve dust and noise control issues with work team.

- **Planning and organising activities** — to plan training requirements.

- **Working with teams and others** — to consult on and control dust and noise.

- **Using mathematical ideas and techniques** — to calculate resource requirements.

- **Solving problems** — to investigate non-conformance.

- **Using technology** — to use information systems to access dust and noise control information.

## MNQGEN430A Apply site quality plan

### Unit Descriptor

This unit covers the quality management responsibilities of an employee with supervisory responsibilities in a *work site* operation. It includes the requirements for implementing of quality processes; the monitoring, adjusting and reporting of performance; and the consolidation of opportunities for further improvement of the quality system.

### Units Replaced

- This unit replaces the unit MNQTL08A Implement and monitor quality systems.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Implement quality processes. | 1.1 | Actively encourage and support team members to participate in the *site quality plan* decision making processes and to assume responsibility and authority. |
| | | 1.2 | Provide information on the *site quality plan* in a language, style and format that is understood by *site personnel*. |
| | | 1.3 | Ensure that mentoring and coaching support is provided to individuals/teams to enable them to implement the *site quality plan.* |
| | | 1.4 | Ensure that site quality requirements are applied in the implementation of other site processes and procedures. |
| 2. | Monitor, adjust and report performance. | 2.1 | Use the organisations systems and technology to *monitor* progress and to identify ways in which planning and operations could be improved. |
| | | 2.2 | Use quality improvement techniques and processes to strengthen customer service. |
| | | 2.3 | Identify and recommend adjusts to the *site quality plan* to relevant personnel and apply approved adjustments. |
| 3. | Consolidate opportunities for further improvement. | 3.1 | Inform individuals/teams of savings and productivity improvements in achieving the *site quality plan*. |
| | | 3.2 | Document work performance and use the information to identify opportunities for further improvement of quality. |
| | | 3.3 | Manage *quality records*, reports and recommendations for improvement in accordance with the *site quality plan* requirements. |

### RANGE STATEMENT

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Site quality plan** may include:

- organisation's quality policy
- allocation of responsibilities

- consultation procedures

- communication procedures and requirements

- monitoring procedures and requirements

- review procedures and requirements

- record keeping procedures and requirements

- reporting procedures and requirements

- training procedures and requirements

- procedures and requirements for dealing with non-compliance

- procedures and requirements for applying interim solutions

- standard operating procedures

- safe operating procedures

- work instructions

- emergency procedures

- permit requirements

- sampling and testing procedures and requirements

- documentation and reporting procedures and requirements

- product specifications

- delivery standards

- customer service standards

- Australian Standards.

**Site personnel** may include:

- employees

- contractors.

**Monitor** is to check, supervise, observe critically, or record the progress of an activity, action or system on a regular basis in order to identify change.

**EVIDENCE GUIDE**

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to apply quality management plans on a work site

- implementation of appropriate procedures and techniques for the efficient and effective application of quality management plans on a work site, while complying with site risk control, health, safety, environmental and communication requirements. This will include:

   a. involving all relevant site personnel in the implementation of the site quality plan

   b. identifying and recommending improvements to the site quality plan.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- statutory/legal control

- key aspects of the organisation's quality system

- the site quality plan procedures and requirements

- human resource management

- continuous improvement processes

- quality plan monitoring and review procedures and processes.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- promote and monitor quality processes

- gain the commitment of individuals/teams to quality principles and practices

- encourage ideas and feedback from other team members in developing and refining processes

- use available technology to monitor and review performance

- apply effective problem identification and problem solving techniques

- initiate quality processes to enhance the quality of individual and team performance

- maintain a focus on quality performance in achieving outcomes acceptable to customers.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.
All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example: language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.


## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.    Perform the process/task
Level 2.    Perform and administer the process/task
Level 3.    Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to obtain information and advise colleagues of quality management responsibilities.

- **Communicating ideas and information** — to resolve quality issues with work team.

- **Planning and organising activities** — to plan training requirements.

- **Working with teams and others** — to consult on and control quality.

- **Using mathematical ideas and techniques** — to calculate resource requirements.

- **Solving problems** — to investigate non-conformance.

- **Using technology** — to use information systems to access quality information.

# MNQGEN500A Implement and maintain management plans to control risk

## Unit Descriptor

This unit covers the use of appropriate measures and criteria to establish management plans to control *risk* in the area of managerial responsibility in work site operations. It includes establishing the framework of the plan, establishing the processes to support the plan; planning and implementation the plan; and monitoring, reviewing and updating the management processes.

The areas of managerial responsibility covered by this unit may include:

- statutory compliance
- OHS
- environment
- quality
- property security
- business risks, such as:
  - credit management
  - capital expenditure
  - sales and marketing
  - finance and accounting.

### *Units Replaced*

This unit replaces the following units:

- MNQQM01A Implement and maintain statutory/legal compliance system
- MNQQM02A Implement and maintain site risk management processes associated with occupational health and safety and environment systems
- MNQQM08A Implement and promote quality system.

### *Links outside this unit*

The work in this unit relates to AS/NZS 4360:1999 Risk Management.

| ELEMENT | PERFORMANCE CRITERIA | |
|---|---|---|
| 1. Develop the framework for the site management plan. | 1.1 | Develop and document site *objectives* in the *area of managerial responsibility*, in *consultation with relevant personnel,* and conforming to the organisation's *policy* and *system's procedures*. |
| | 1.2 | Develop and document the structures for the application of the management system*,* in consultation with relevant personnel, and conforming to the organisation's *policy* and *system's procedures*. |
| | 1.3 | Define, allocate and document the responsibilities for applying the management system in job descriptions and duty statement for all relevant site positions. |

| ELEMENT | PERFORMANCE CRITERIA | |
|---|---|---|
| 2. Develop the processes to support the site management plan. | 2.1 | Identify existing and potential site *hazards and risks* in the *area of managerial responsibility* in accordance |

with legislation, codes of practice and trends identified from the record system.

2.2 Access, interpret and clarify the organisation's criteria for *assessing and treating risks*.

2.3 Develop and document detailed *site procedures and practices* for the application of the management system in consultation with relevant personnel, and that conform to the organisation's *policy* and *system's procedures*.

2.4 Identify, obtain and maintain information sources and expert advise required to support the management plan.

3. Prepare and implement the plan.

3.1 Plan, schedule and document how the management systems will be introduced to the entire work site.

3.2 Identify, seek and/or provide *resources* for the operation of the management plan, in a timely and consistent manner.

3.3 Provide and explain information on the site management plan in a form readily accessible to site employees.

3.4 Provide/arrange appropriate development and/or training for site personnel on the management plans' *site procedures and practices*.

3.5 Make available information on known and intended process changes and enhancements to *site personnel.*

3.6 Provide support and encouragement to those responsible for the conduct of the plan's activities.

3.7 Ensure all management plans' *records and reports are* produced, processed and maintained as specified by legislative and organisation's requirements.

4. Monitor, review and update the management processes.

4.1 *Monitor* the management plans' activities and achievement targets and provide/focus *resources* to ensure the implementation plan is satisfied.

4.2 Review and update the management plans' implementation plan periodically and when changing circumstances are anticipated/occur.

4.3 Complete and retain management plans' documentation covering the reasons for and changes made in accordance with the organisation and relevant *legislative requirements*.

### RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. The organisation's procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Risk** is the chance of something happening that will have an impact upon objectives. It is measured in terms of consequence and likelihood.

**Consultation with relevant personnel** would typically include:

- senior management
- subject matter experts
- regulatory authorities
- tenderers
- project managers
- contractors
- employees
- community
- customers
- suppliers.

**The policy** is the statement of over all intent and direction of the organisation in respect of the specific area of managerial responsibility.

**The system's procedures** are the procedures that support and expand on the policy and set out the requirements for implementing the system on individual sites. They provide direction and guidance to those responsible for implementation of the system and in the preparation of site specific work procedures, instruction and practices to put the system into effect.

**System's procedures** may include:

- identification of hazards
- risk identification
- risk assessment
- risk treatment
- interim solutions
- dealing with unplanned incidents and events
- consultation
- communication
- monitoring
- review
- record keeping
- reporting
- training.

**Hazards** are sources of potential harm or situations with the potential to cause loss.

**Risk identification** is the process of determining what can happen, why and how.

**Risk assessment** is the overall process of risk analysis and risk evaluation.

**Risk analysis** is a systematic use of available information to determine how often specified events may occur and the magnitude of their likely consequences.

**Risk evaluation** is the process used to determine risk management priorities by comparing the level of risk against predetermined standards, target risk levels or other criteria.

**Risk treatment** is the selection and implementation of appropriate options for dealing with risk.

**Risk treatment** should considered using options in sequence from eliminating the hazard, substitution, engineering controls, administrative controls, and finally personal protective equipment.

**Site procedures and practices** may include:

- standard operating procedures
- safe operating procedures
- work instructions
- emergency procedures
- allocation of responsibilities
- permit requirements
- sampling and testing requirements
- documentation and reporting requirements.

**Resources** may include:

- people
- finance
- equipment
- buildings/facilities
- technology
- information.

**Site personnel** may include:

- employees
- contractors.

**Records and reports** may include

- results
- recommendations
- assessment forms
- action planning documents.

**Monitor** is to check, supervise, observe critically, or record the progress of an activity, action or system on a regular basis in order to identify change.

**Legislative requirements** may include:

- requirements for the maintenance of records for statutory/legal breaches
- provision of information and training

- regulations and codes of practice relating to statutory/legal compliance

- site representatives and committees

- issue resolution.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to establish and maintain risk management plans on work sites,

- implementation of appropriate procedures and techniques for the efficient and effective establishment and maintenance of risk management plan on work sites, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

    a. preparation and issuing of a pit plan that reflects the risk management requirements of site and is capable of achieving all of its planned outcomes and the organisation's policy and requirements

    b. identifying and making available the required resources for the safe, efficient and effective execution of the plan

    c. providing sound leadership and supervision of team in undertaking the implementation and application of the plan

    d. the successful implementation of the plan.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- organisation's policies, goals and objectives

- relevant legislative requirements

- action planning methods

- negotiation skill

- written and oral communication methods

- receptive listening skills

- human resource management processes

- method of identifying appropriate action based on cost, safety, and welfare issues

- work procedure/instruction writing

- reporting and recording procedures

- work site operating procedures

- hazard identification processes

- risk assessment processes
- risk treatment processes
- documentation methods.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- read, interpret and apply legislation
- develop and maintain site procedures and practices
- read, interpret, apply and communicate technical information, rules, procedures, regulations etc
- document and facilitate management planning
- maintain relevant records and documents
- monitor and decide on changes to process
- provide leadership and guidance for group activities
- communicate effectively in the workplace
- explain complex information to superiors/subordinates
- provide coaching and mentoring support
- apply active listening
- show sensitivity to the needs and feelings of others
- actively encourage the free exchange of information.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example: language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.    Perform the process/task
Level 2.    Perform and administer the process/task
Level 3.    Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 3 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to determine how the system can be improved.

- **Communicating ideas and information** — to facilitate the implementation of the plan.

- **Planning and organising activities** — to facilitate the implementation of the plan.

- **Working with teams and others** — to develop appropriate site procedures.

- **Using mathematical ideas and techniques** — to analyse trends.

- **Solving problems** — to determine likely options for treatment of risk.

- **Using technology** — to maintain records and distribute information.

## MNQGEN600A Establish and maintain the risk management system

## Unit Descriptor

This unit covers the use of appropriate measures and criteria to establish and maintain an organisation's *risk management* system. It includes establishing the framework of the system, establishing the processes to support the system; planning and facilitating the implementation of the system; auditing the risk management processes; and ensuring completion of records and reports.

### *Units Replaced*

This unit replaces, in part, the unit MNQSM02 Design, implement and evaluate organisational risk management processes associated with occupational health and safety and environmental management.

### *Links outside this unit*

The work in this unit relates to AS/NZS 4360:1999 Risk Management.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Establish the framework for the system. | 1.1 | Develop the *policy* and objectives that express the organisation's commitment to *risk management*. |
| | | 1.2 | Establish and implement the structure and framework for the of the *risk management* system. |
| | | 1.3 | Define, allocate and document responsibilities for *risk management* in job descriptions and duty statement for all relevant positions. |
| 2. | Establish processes to support the system. | 2.1 | Develop, document and communicate detailed *systems procedures* covering *risk identification, assessment, treatment,* communication, consultation, monitoring and review. |
| | | 2.2 | Provide/arrange appropriate development and/or training for those who have responsibilities within the *risk management* system. |
| | | 2.3 | Identify, obtain and maintain information sources required to support the *risk management* system and make them available to those who implement the *risk management processes*. |
| | | 2.4 | Make available information on known and intended process changes and enhancements to those responsible for implementing the *risk management processes*. |
| | | 2.5 | Determine and make available organisation's criteria for assessing the acceptability of risks to those responsible for implementing *risk management processes*. |
| **ELEMENT** | | **PERFORMANCE CRITERIA** | |
| | | 2.6 | Obtain and provide expert advice as necessary to those responsible for implementing *risk management processes*. |

| | | | |
|---|---|---|---|
| 3. | Plan and facilitate the implementation of the system. | 3.1 | Plan, schedule and document the systems coverage of the entire work environment. |
| | | 3.2 | Monitor the system activities and achievement targets and provide/focus *resources* to ensure the work plan is satisfied. |
| | | 3.3 | Provide support and encouragement to those responsible for the detailed system activities. |
| | | 3.4 | Review and update periodically the system work plan when changing circumstances are anticipated/occur. |
| 4. | Audit the management processes. | 4.1 | Formally *audit risk management processes*, including operating procedures and implementation processes, to ensure compliance and effectiveness. |
| | | 4.2 | Respond to changed requirements disclosed during audits in a systematic and timely manner. |
| | | 4.3 | Complete and retain *risk management* documentation covering the reasons for and changes made in accordance with the organisation and relevant *legislative requirements*. |
| 5. | Completion of records and reports. | 5.1 | Ensure all *risk management* documentation is produced, processed and maintained as specified by legislative and organisation's requirements. |

**RANGE STATEMENT**

The following range of variables is subject to site-specific operations, but is not limited to the following details. The organisation's procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**The policy** is the statement of over all intent and direction of the organisation in respect of the specific area of managerial responsibility.

**Risk** is the chance of something happening that will have an impact upon objectives. It is measured in terms of consequence and likelihood.

**Risk management** is the culture, processes and structure that are directed towards the effective management of potential opportunities and adverse risk.

**Risk management** may be applied to:

- statutory compliance
- OHS
- environment
- quality
- property security
- business risks, such as:
  - credit management
  - capital expenditure
  - sales and marketing
  - finance and accounting.

**The system's procedures** are the procedures that support and expand on the policy and set out the requirements for implementing the system on individual sites. They provide direction and guidance to those responsible for implementation of the system including the preparation of site specific work procedures, instruction and practices to put the system into effect.

**System's procedures** may include:

- identification of hazards
- risk identification
- risk assessment
- risk treatment
- interim solutions
- dealing with unplanned incidents and events
- consultation
- communication
- monitoring
- review
- record keeping
- reporting
- training.

**Resources** may include:

- people
- finance
- equipment
- buildings/facilities
- technology
- information.

**Risk identification** is the process of determining what can happen, why and how.

**Risk assessment** is the overall process of risk analysis and risk evaluation.

**Risk analysis** is a systematic use of available information to determine how often specified events may occur and the magnitude of their likely consequences.

**Risk evaluation** is the process to determine risk management priorities by comparing levels of risk against predetermined standards, target risk levels or other criteria.

**Risk treatment** is the selection and implementation of appropriate options for dealing with risk.

**Risk treatment** should considered using options in sequence from eliminating the hazard, substitution, engineering controls, administrative controls, and finally personal protective equipment.

**Risk management processes** are the systematic application of management policies, procedures and practices to the task of establishing the context, identifying, analysing, evaluating, treating, monitoring and communicating risk.

**Consultation** would typically include:

- regulatory authorities
- tenderers
- project managers
- contractors
- employees
- community
- customers
- suppliers.

**Monitor** is to check, supervise, observe critically, or record the progress of an activity, action or system on a regular basis in order to identify change.

**Audit** is a systematic examination against defined criteria to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and suitable to achieve the organisation's policy and objectives.

**Records and reports** may include:

- audit and inspection reports
- hazard registers
- risk analysis records
- risk treatment reports
- minutes of meetings (risk management, OHS, environmental etc)
- induction, instruction, training and assessment
- manufacturer's and supplier's information
- dangerous goods and hazardous substances registers
- plant and equipment maintenance and testing reports
- workers compensation and rehabilitation records
- First Aid/medical records
- major incident and emergency response instructions
- emergency contact lists
- financial records
- contract documents.

**Legislative requirements** may include:

- requirements for the maintenance of records for statutory/legal breaches
- provision of information and training
- regulations and codes of practice relating to statutory/legal compliance
- site representatives and committees
- issue resolution.

## EVIDENCE GUIDE

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to establish and maintain risk management systems in mining operations

- implementation of appropriate procedures and techniques for the efficient and effective establishment and maintenance of risk management systems in mining operations, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

  a. establishing policies, objectives, structures and the framework for the risk management system
  b. identifying, interpreting and communicating technical aspects of risk management
  c. identifying and allocating risk management responsibilities
  d. establishing information and training processes to support the risk management system
  e. plan and facilitate the implementation of the risk management system
  f. audit and modify the risk management system
  g. coordinate and monitor actions and respond to changing situations.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- organisation's policies, goals and objectives

- relevant legislative requirements

- action planning methods

- advanced negotiation skill

- advanced written and oral communication methods

- receptive listening skills

- human resource management processes

- method of identifying appropriate action based on cost, safety, and welfare issues

- work procedure/instruction writing

- reporting and recording procedures

- work site operating procedures

- hazard identification processes

- risk assessment processes

- risk treatment processes

- documentation methods.

### Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- read, interpret and apply legislation

- develop and maintain procedures and policies

- read, interpret, apply and communicate technical information, rules, procedures, regulations etc

- facilitate and document management planning

- maintain relevant records and documents

- monitor and decide on changes to process

- provide leadership and guidance for group activities

- communicate effectively in the workplace

- explain complex information to superiors/subordinates

- provide coaching and mentoring support

- apply active listening

- show sensitivity to the needs and feelings of others

- actively encourage the free exchange of information.

### Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

### Prerequisite Units

There are no prerequisite units for this unit.

### Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

### Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

### Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example: language, literacy and numeracy demands of assessment should not be greater than those required on the job.

### Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency. Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1. Perform the process/task
Level 2. Perform and administer the process/task
Level 3. Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 3 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to determine how the system can be improved.

- **Communicating ideas and information** — to facilitate the implementation of the system.

- **Planning and organising activities** — to facilitate the implementation of the system.

- **Working with teams and others** — to develop appropriate systems procedures.

- **Using mathematical ideas and techniques** — to analyse trends.

- **Solving problems** — to determine likely options for treatment of risk.

- **Using technology** — to maintain records and distribute information.

# MNQGEN601A Establish and maintain the statutory compliance management system

## Unit Descriptor

This unit covers the use of appropriate measures and criteria to establish the organisation's *statutory compliance* system. Its includes the establishing and maintaining the management system's framework and participative arrangements; procedures for identifying non-compliance, treating compliance and controlling statutory compliance; organisational procedures for statutory compliance; a *statutory compliance* records system; and the evaluation of the system and related policies, procedures and programs.

### *Units Replaced*

- This unit replaces the unit MNQSM01A Design, implement, monitor and evaluate statutory/legal compliance system.

| ELEMENT | PERFORMANCE CRITERIA | |
|---|---|---|
| 1. Establish the framework for the compliance management. | 1.1 | Develop, document and have approved *policies* and *system procedures* that clearly express the organisation's commitment to *statutory compliance*. |
| | 1.2 | Clearly define, allocate and include in job descriptions and duty statements for all relevant positions, responsibilities and duties that will allow implementation and integration of the *statutory compliance* management systems. |
| | 1.3 | Identify, source and/or provide the *resources* for the operation of the statutory compliance system in a timely and consistent manner. |
| | 1.4 | Provide and explain information on *statutory compliance* systems and procedures for the area of responsibility in a form that is readily accessible to employees. |
| 2. Establish and maintain participative arrangements. | 2.1 | Establish and ensure the maintenance of appropriate consultative processes, in consultation with employees and their representatives, in accordance with relevant legislation and consistent with the organisation's overall process for consultation. |
| | 2.2 | Ensure issues raised through participation and *consultation* are dealt with and resolved promptly and effectively in accordance with procedures for issue resolution. |
| | 2.3 | Ensure information about the outcomes of participation and *consultation* is provided in a manner accessible to employees. |

| **ELEMENT** | | **PERFORMANCE CRITERIA** | |
|---|---|---|---|
| 3. | Establish and monitor procedures for identifying non-compliance. | 3.1 | Develop *system procedures* for identifying potential and existing non-compliance and ensure their implementation. |
| | | 3.2 | Monitor and ensure the reporting of procedures for identifying potential and existing non-compliance. |
| | | 3.3 | Modify procedures for identifying potential and existing non-compliance, where required. |
| 4. | Establish and monitor procedures for treating compliance. | 4.1 | Develop *system procedures* to *treat* compliance and monitor adherence to them by the work group in accordance with workplace procedures and ensure their implementation. |
| | | 4.2 | Monitor existing compliance treatment measures and ensure there is regular reporting of results in accordance with workplace procedures. |
| | | 4.3 | Identify and report inadequacies in existing compliance measures to designated personnel. |
| | | 4.4 | Identify and report inadequacies in resource allocation for implementation of compliance measures to designated personnel. |
| 5. | Establish and maintain procedures for controlling statutory compliance. | 5.1 | Establish and ensure the implementation of measures to avoid non-compliance in relevant legislation, codes of practice and trends identified from the organisation's records system. |
| | | 5.2 | Ensure that interim solutions are implemented until a permanent *control* measure is developed, when measures, which treat non-compliance at its source, are not immediately practicable. |
| | | 5.3 | Develop a *system procedure* for ongoing treatment of compliance and integrate it within general systems of work and procedures. |
| | | 5.4 | Monitor activities to ensure that the compliance treatment procedure is adopted effectively throughout the area of managerial responsibility. |
| 6. | Establish and maintain organisational procedures for statutory compliance. | 6.1 | Identify potential non-compliant events. |
| | | 6.2 | Develop *system procedures* which would treat compliance and legislative requirements as a minimum, in consultation with appropriate statutory bodies and ensure their implementation. |
| | | 6.3 | Provide appropriate information and training to all employees to enable implementation of the correct procedures in all relevant circumstances. |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 7. Establish and maintain a statutory compliance records system. | 7.1 Establish and monitor the system for keeping *statutory compliance* records that allow identification of patterns of non-compliance within the area of managerial responsibility. |
| 8. Evaluate the statutory compliance system and related policies, procedures and programs. | 8.1 Assess the effectiveness of the *statutory compliance* system and related policies, procedures and programs according to the organisation's aims. |
| | 8.2 Develop and facilitate the implementation of improvements to the *statutory compliance* system to ensure more effective achievement of the organisation's aims. |
| | 8.3 Assess compliance with legislation and codes of practice to ensure that legal standards are maintained as a minimum. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Statutory compliance** may include:

- trade practices
- weights and measures
- waterways
- workers compensation/work cover
- planning and assessment
- local government
- dangerous goods
- minerals and extractive industry licensing
- industrial relations
- navigation
- Mines Act
- Common Law
- development of training policies/programs to aid compliance.

**The policy** is the statement of over all intent and direction of the organisation in respect of the specific area of managerial responsibility.

**The system's procedures** are the procedures that support and expand on the policy and set out the requirements for implementing the system on individual sites. They provide direction and guidance to those responsible for implementation of the system and in the preparation of site specific work procedures, instruction and practices to put the system into effect.

**System's procedures** may include:

- identification of hazards
- risk identification
- risk assessment
- risk treatment
- interim solutions
- dealing with unplanned incidents and events
- consultation
- communication
- monitoring
- review
- record keeping
- reporting
- training.

**Resources** may include:

- people
- finance
- buildings/facilities
- technology
- information.

**Consultation** would typically include:

- regulatory authorities
- project managers
- employees
- community
- customers
- tenderers
- suppliers and contractors.

**Treat** selection and implementation of appropriate options to prevent or deal with potential or existing non-compliance.

**Control** that part of the statutory compliance management system that involves the implementation of policies, standards, procedures and physical changes to eliminate or minimise the likelihood of non-compliance.

**Monitor** is to check, supervise, observe critically, or record the progress of an activity, action or system on a regular basis in order to identify change.

**Legislative requirements** may include:

- requirements for the maintenance of records for statutory/legal breaches

- provision of information and training

- regulations and codes of practice relating to statutory/legal compliance

- site representatives and committees

- issue resolution.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to establish and maintain a statutory compliance management system on a work site

- implementation of appropriate procedures and techniques for the efficient and effective establishing and maintaining of a statutory compliance management system on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
  a. clear and compliant organisational policy on statutory compliance
  b. effective procedures for the comprehensive and accurate identification of statutory compliance required on individual sites
  c. effective procedures the development of site-specific work instructions for implementation and maintenance of the compliance system
  d. effective procedures for the training of site personnel in statutory compliance requirements, responsibilities and procedures
  e. compliant record systems
  f. effective and efficient procedures for implementation of the compliance and treating non-compliance with statutory compliance by work site personnel
  g. effective procedures for the monitoring and modification of the compliance system to ensure on-going compliance.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- organisation's policies, goals and objectives

- relevant legislative requirements

- action planning methods

- advanced negotiation skill

- advanced written and oral communication methods

- receptive listening skills

- human resource management processes

- method of identifying appropriate action based on cost, safety, and welfare issues

- work procedure/instruction writing

- reporting and recording procedures

- work site operating procedures

- hazard identification processes

- risk assessment processes

- risk treatment processes

- documentation methods.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- read, interpret and apply legislation

- develop and maintain procedures and policies

- read, interpret, apply and communicate technical information, rules, procedures, regulations etc

- facilitate and document management planning

- maintain relevant records and documents

- monitor and decide on changes to process

- provide leadership and guidance for group activities

- communicate effectively in the workplace

- explain complex information to superiors/subordinates

- provide coaching and mentoring support

- apply active listening

- show sensitivity to the needs and feelings of others

- actively encourage the free exchange of information.

## Concurrent Assessment

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.    Perform the process/task
Level 2.    Perform and administer the process/task
Level 3.    Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 2 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to identify the requirements for and develop the framework for the statutory compliance management system.

- **Communicating ideas and information** — to implement the statutory compliance management system.

- **Plan and organise activities** — to implement the system.

- **Working with teams and others** — to gain input to and acceptance of the system.

- **Using mathematical ideas and techniques** — to analyse trends.

- **Solving problems** — to treat non-compliant situations.

- **Using technology** — to record and communicate the outcomes of the application of the system.

# MNQGEN602A Manage major incidents and emergencies

## Unit Descriptor

This unit covers the provision of leadership during and after a major incident and/or emergency. Its application involves strategic management functions including resource coordination, interaction with employees and their families and dealing with the media.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Review emergency preparedness and response systems. | 1.1 | Review the emergency preparedness plan and confirmed for relevance and timeliness on a regular basis. |
| | | 1.2 | Review the organisational structure for the management of emergency preparedness and response for relevance and accuracy on a regular basis. |
| | | 1.3 | Review emergency response procedures for management of classes of *incident* for relevance and accuracy on a regular basis. |
| | | 1.4 | Confirm the emergency response procedures for management of decision-making processes and decision monitoring systems. |
| | | 1.5 | Confirm plans with relevant *stakeholders* and specialists. |
| 2. | Manage the incident/ emergency response. | 2.1 | Access *incident* information receipt and recording systems in accordance with site requirements. |
| | | 2.2 | Access and apply emergency response and evacuation plans and procedures in accordance with site requirements. |
| | | 2.3 | Establish *operations facilities*, including *communications* to support them, in accordance with the emergency plan. |
| | | 2.4 | Apply action planning processes to manage the situation/*incident* in accordance with the emergency plan. |
| | | 2.5 | Identify and apply required *services*, personnel, *equipment* and *resources* for the *incident* in accordance with the emergency plan. |
| | | 2.6 | Confirm and clarify roles and responsibilities, as specified in the emergency response and evacuation plans and procedures and communicated to all persons. |
| 3. | Access and respond to information, advice and support. | 3.1 | Bring together specialist technical and professional staff to review the situation. |
| | | 3.2 | Plans are developed to deal with *immediate areas of concern*. |
| | | 3.3 | Clarify and confirm individual's roles and responsibilities. |

|  | ELEMENT | | PERFORMANCE CRITERIA |
|---|---|---|---|
| 4. | Apply *post-incident management* procedures. | 4.1 | Determine and establish processes to investigate nature and cause of situation/incident in accordance with *statutory* and site requirements. |
| 5. | Audit and review the effectiveness of the incident/emergency management response. | 5.1 | Audit response systems for effectiveness and compliance with statutory and management plan standards. |
|  |  | 5.2 | *Audit incident*/emergency management response processes for effectiveness and for compliance with statutory and work site requirements. |
|  |  | 5.3 | *Audit* recording systems for effectiveness and for compliance with the emergency preparedness and response plan. |
|  |  | 5.4 | Respond promptly to instances of non-compliance or other discrepancies/deficiencies revealed by audit and modify the *incident*/emergency management system accordingly. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Audit** is a systematic examination against defined criteria to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve the organisation's policy and objectives.

**Consequenc**e is the outcome of an event of situation expressed qualitatively or quantitatively, being a loss, injury, disadvantage or gain.

**Cost** of activities, both direct and indirect, involves any negative impact, including money, time, labour, disruption, goodwill, political and intangible losses.

**Frequency** is a measure of likelihood expressed as the number of occurrences of an event in a given time.

**Hazard** is a source or a situation with a potential for harm in terms of human injury or ill-health, damage to property, damage to the environment, or a combination of these.

**Hazard identification** is the process of recognising that a hazard exists and defining its characteristics.

**Likelihood** is used as a qualitative description of probability and frequency.

**Loss** is any negative consequence, financial or otherwise.

**Monitor** means to check, supervise, observe critically, or record the progress of an activity, action or system on a regular basis in order to identify change.

**Probability** means the likelihood of a specific outcome, measured by the ratio of specific outcomes to the total number of possible outcomes. Probability is expressed as a number between 0 and 1, with 0 indicating an impossible outcome and 1 indicating an outcome is certain.

**Risk** means the combination of the frequency, or probability of occurrence, and consequence of a specified hazardous event.

**Risk acceptance** is an informed decision to accept the likelihood and the consequences of a particular risk.

**Risk analysis** is a systematic use of available information to determine how often specified events may occur and the magnitude of their likely consequences.

**Risk assessment** is the overall process of estimating the magnitude of risk and deciding what actions will be taken.

**Standard operating procedures (SOP)** are also known as safe working procedures, safe operating procedures and standard working procedures.

**Post-incident management** is the control of activities arising from an incident and can include: legal advice, environmental aspects, critical incident stress debriefing, interviewing, investigations, witness interview statements, restoration of normal operations, media releases, public relations, employee welfare and family support, security of evidence, liaison with statutory/legal bodies, statutory investigations, review of emergency procedures, documentation of ongoing operations, restoration of emergency preparedness.

**Work site** also covers quarrying, refining and smelting operations.

**Types of incident** can be identified as, but not limited to:

- chemical injury
- entrapment
- equipment damage
- fire
- fugative chemicals
- inundation
- irrespirable atmosphere
- personnel injury or death
- rock fall
- unscheduled explosion.

**Incidents** can be caused by, but are not limited to:

- aircraft accident
- bulk-head collapse
- explosives
- flammable solids or liquids
- hazchem
- inrush
- mining induced subsidence
- outburst
- release of stored energy
- seismic event

- sulphide dust explosion
- vehicle accidents
- vehicle fire.

**Stakeholders** and other consulting partners can include, but are not limited to:

- ambulance
- board of directors
- contractors
- critical incident stress debriefing organisations
- customers
- emergency management and assistance organisations
- employee representatives
- employees
- families
- fire brigade
- government mining authorities
- hospital
- insurance companies
- local community
- local government
- manufacturers
- medical staff
- mines rescue service
- police
- specialist professionals
- suppliers.

**Required services and resources** can include, but are not limited to:

- internal work site services and resources
- contractors
- suppliers
- local community
- manufacturers
- inspectorate
- police
- mines rescue services
- fire brigade
- ambulance
- medical staff

- hospital
- critical incident stress debriefing organisations
- local emergency management organisations
- local government
- media
- coroner's representative
- security services
- solicitors
- workers representatives
- other work sites
- experts such as engineers, scientists
- down-hole camera
- drill rigs
- forensic.

**Immediate areas of concern** may include:

- employee welfare
- dealing with the media
- legal issues
- environmental aspects
- informing the community.

**Communications** may include:

- radio
- telephone
- telemetry
- verbal
- written
- computers
- runners
- mirrors
- signals
- stench gas
- alarms/sirens.

**Equipment** refers to that needed to control the incident and includes but is not restricted to:

- rescue equipment
- mining equipment
- transport
- specialised equipment from external sources

- monitoring and analysis equipment
- breathing apparatus.

**Media** may include:

- radio
- print media
- television.

**Operations** facilities are those which are set up to manage an incident and may include, but are not restricted to:

- operations centre
- press room
- mortuary
- muster areas
- meeting rooms
- communications centres and networks.

**Future operations** may include, but are not restricted to:

- sealing work site areas
- restoration to full production
- suspension of operations
- full closure of work site.

**Statutory/legal compliance** may include but is not limited to:

- common law
- coroner
- dangerous goods
- development of training policies/programs to aid compliance
- emergency services
- environmental
- explosives
- gas and petroleum
- industrial relations
- local government
- minerals and extractive industry licensing
- mines act
- navigation
- planning and assessment
- road traffic
- safety and health
- trade practices

- waterways
- weights and measures
- workers compensation/WorkCover.

**Actions** are to be in accordance with all relevant statutory/legal requirements, particularly:

- requirements for the maintenance of records for statutory/legal breaches
- provision of information and training
- regulations, codes of practice and guidelines relating to statutory/legal compliance
- site representatives and committees
- issue resolution.

**Resources** may include, but are not limited to:

- people
- finance
- equipment
- environment
- buildings/facilities
- technology
- information.

**Negotiations** may be with a variety of internal or external sources and be:

- formal or informal
- short term or ongoing
- multi-lingual and cross-cultural
- enterprise agreements
- legislation regulation compliance
- and include relative authorities, project managers, employees, contractors, customers and the community.

## EVIDENCE GUIDE

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to manage major incidents and emergencies on a work site
- implementation of appropriate procedures and techniques for the efficient and effective management of major incidents and emergencies on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
  a. review emergency preparedness planning for works

    b.   implement response procedures for management of different classes of incident/emergency

    c.   identify the roles of stakeholders and specialists at incidents/emergencies

    d.   implement the structure and roles of on-site functions and personnel

    e.   organise and coordinate information gathering, analysis and communication

    f.   implement action plan development and evaluation

    g.   establish incident operations facilities

    h.   implement incident management planning

    i.   apply post-incident management procedures

    j.   audit and review incident/emergency management response.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- audit review process and techniques
- call-out procedures
- classification of types of incidents
- decision making processes
- deployment of staff underground
- economic considerations and decisions
- effects of heat and humidity
- effects of visibility
- emergency and disaster planning processes and techniques
- emotional effects of emergencies on rescuers and work site personnel
- environmental risks and controls
- equipment handling
- equipment required for different types of emergency
- escape strategies and technology
- hazard identification
- incident resources and how to access them
- industry and legislative stakeholders
- insurance policies and considerations
- intervention and control techniques for heating, fires, explosions. outburst, extrication or inrushes
- legal implications of incidents
- legal requirements of incident management teams
- legislation applicable to work sites
- legislation regarding resumption of normal operations
- legislative requirements

- media policies and procedures

- work site closure procedures and the legislative implications

- mine rescue guidelines and capabilities

- work site-type incidents and risks

- numbers needed to run the work site at planned operational levels

- rescue team structure, procedures and equipment, and standby team requirements

- risk management principles and techniques

- sealing procedures and the legislative implications

- self-escape philosophies, systems and equipment

- services and agencies available to assist in an emergency

- structure of emergency guidelines

- structure of emergency organisations

- structure, roles, capabilities and operational limitations of external resources and agencies used during work sites incidents

- support services role and access

- the requirements and structure for fresh air base/refuge chambers

- the role of stakeholders

- the techniques and equipment used for collecting and analysing atmospheric conditions

- titles and roles of members of incident management team

- training and assessment principles

- ventilation and its influence on incidents, and decisions to be made.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- access and use work site information and recording systems

- analyse information

- assess hazards and associated risks

- brainstorm to collect maximum information

- carry out fault-tree analyses

- communicate effectively with members of the media

- communicate effectively with people personally or through technical devices during incidents

- delegate responsibility and tasks

- develop action plans

- effectively interview

- effectively question

- evaluate systems and equipment

- facilitate groups to work together

- formulate and develop emergency preparedness plans

- identify or establish work site facilities for incident management

- make effective decisions

- organise personnel and resources

- participate as a team member

- read and interpret work site plans

- write reports.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

### Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.
All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.
The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

### Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- simulations

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.
Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.
Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

| | |
|---|---|
| Level 1. | Perform the process/task |
| Level 2. | Perform and administer the process/task |
| Level 3. | Perform, administer and evaluate/design the process/task |

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 3 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to review work site emergency preparedness and response systems.

- **Communicating ideas and information** — to confirm plans with relevant stakeholders.

- **Planning and organising activities** — to manage the incident/response.

- **Working with teams and others** — to establish operational facilities.

- **Using mathematical ideas and techniques** — to identify required services, personnel, equipment and resources.

- **Solving problems** — to investigate the nature and cause of the situation/incident.

- **Using technology** — to audit recording systems for effectiveness and compliance.

# MNQGEN610A Establish and maintain the occupational health and safety management system

## Unit Descriptor

This unit covers the establishment and management of the *occupational health and safety management system* in a *mining* organisation. Its application is to ensure the workplace is, so far as is reasonably achievable, safe and without risks to the health of employees. The safety system may also be known as the Safety and Health Management System.

### Units Replaced

This unit replaces part of the unit MNQSM02 Design, maintain and evaluate organisational risk management processes associated with occupational health and safety and environmental management systems.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Establish and maintain the framework for the OHS management system. | 1.1 | Develop, document and have approved *policies* and *system procedures* that clearly express the organisation's commitment to *occupational health and safety*. |
| | | 1.2 | Clearly define, allocate and include in job descriptions and duty statements for all relevant positions, responsibilities and duties that will allow implementation and integration of the OHS management systems. |
| | | 1.3 | Identify, source and/or provide the *resources* for the operation of the OHS system in a timely and consistent manner. |
| | | 1.4 | Provide and explain information on *occupational health and safety* systems and procedures for the area of responsibility in a form readily accessible to employees. |
| 2. | Establish and maintain participative arrangements for the management of occupational health and safety. | 2.1 | Establish and ensure the maintenance of appropriate consultative processes, in consultation with employees and their representatives, in accordance with relevant legislation and consistent with the organisation's overall process for consultation. |
| | | 2.2 | Ensure issues raised through participation and *consultation* are dealt with and resolved promptly and effectively in accordance with procedures for issue resolution. |
| | | 2.3 | Ensure information about the outcomes of participation and *consultation* is provided in a manner accessible to employees. |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 3. Establish and maintain procedures for identifying hazards. | 3.1 Develop and maintain *system procedures* for ongoing identifying of existing and potential *hazards* and ensure the implementation of these procedure in site procedures and systems of work. |
| | 3.2 *Monitor* activities to ensure that *hazard identification* procedure is adopted effectively throughout the organisation. |
| | 3.3 Ensure procedures are in place and applied for *hazard identification* at the planning, design and evaluation stages of any change in the workplace to ensure that new hazards are not created. |
| 4. Establish and maintain procedures for assessing risk. | 4.1 Ensure appropriate *assessment of risks* presented by identified hazards is carried out in accordance with the OHS legislation and codes of practice. |
| | 4.2 Develop a *system procedure* for ongoing *assessment of risks* and ensure its integration within site procedures and systems of and work. |
| | 4.3 *Monitor* activities to ensure that *risk assessment* procedure is adopted effectively throughout the organisation. |
| | 4.4 Ensure procedures are in place for *risk assessment* to be addressed at the planning, design and evaluation stages of any change within the organisation to ensure that risks are not created. |
| 5. Establish and maintain procedures for treating risks. | 5.1 Develop and ensure implementation of measures to *control assessed risks* in accordance with relevant OHS legislation, codes of practice and trends identified from the OHS records system. |
| | 5.2 Ensure the implementation of interim solutions until a permanent control measure is developed when measures which *treat a risk* at its source are not immediately practicable. |
| | 5.3 Develop *system procedures* for ongoing *control of risks* and ensure their integration within site procedures and general systems of work. |
| | 5.4 *Monitor* activities to ensure that the *risk treatment* procedure is adopted effectively throughout the organisation. |
| | 5.5 Ensure *risk treatment* is addressed at the planning, design and evaluation stages of any change within the organisation to ensure that adequate risk control measures are included. |

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| | | 5.6 | Identify inadequacies in existing *risk treatment* measures and seek and provide resources to enable implementation of new measures according to appropriate procedures. |
| 6. | Establish and maintain organisational procedures for dealing with unplanned incidents. | 6.1 | Identify the range of most likely potential unplanned *incidents* from an analysis of likely risks. |
| | | 6.2 | Develop *systems procedures* in consultation with appropriate emergency services that would treat the risks associated with the potential events that meet legislative requirements as a minimum. |
| | | 6.3 | Provide appropriate information and training to all employees to enable implementation of the correct procedures in all relevant circumstances. |
| 7. | Establish and maintain an occupational health and safety training program. | 7.1 | Develop and ensure implementation of an OHS training program to identify and fulfil employees' OHS training needs. |
| 8. | Establish and maintain a system for OHS records. | 8.1 | Establish and *monitor* the system for keeping OHS records to allow identification of patterns of occupational injury and disease within the organisation. |
| 9. | Evaluate the organisation's OHS system and related policies, procedures and programs. | 9.1 | Assess the effectiveness of the organisation's OHS management system and related policies, procedures and programs in accordance with the organisation's goals and objectives and statutory requirements. |
| | | 9.2 | Develop and ensure implementation of improvements to the OHS management system to ensure more effective achievement of the organisation's aims with respect to OHS. |
| | | 9.3 | Assess compliance with OHS legislation and codes of practice to ensure that legal OHS standards are maintained as a minimum. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Safety** a state in which the risk of harm to persons or damage is limited to an acceptable level.

**OHS management system (OHSMS)** the part of the overall management system which includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the OHS policy, and so managing the OHS risks associated with the business of the organisation.

**OHS policy** statement by the organisation of its intentions and principles in relation to its overall OHS performance which provides a framework for action and for the setting of its OHS objectives and targets.

**OHS objectives** goals in terms of OHS performance, arising from the OHS policy that an organisation sets itself to achieve, and which are quantified where practicable.

**The system's procedures** are the procedures that support and expand on the policy and set out the requirements for implementing the system on individual sites. They provide direction and guidance to those responsible for implementation of the system and in the preparation of site specific work procedures, instruction and practices to put the system into effect.

**System's procedures** may include:

- identification of hazards
- risk identification
- risk assessment
- risk treatment
- interim solutions
- dealing with unplanned incidents and events
- consultation
- communication
- monitoring
- review
- record keeping
- reporting
- training.

**Relevant positions for implementing the OHS management system** will include:

- managers
- supervisors
- OHS officer/manager
- First Aid officers.

**Responsibility** is being accountable for the achievement of objectives.

**Resources** may include:

- people
- finance
- buildings/facilities
- technology
- information.

**OHS management system principles** are to include:

- commitment and policy
- planning

- implementation
- measurement and evaluation
- review and improvement.

**Processes for consultation** may include:

- OHS committees
- consultation with health and safety representatives
- issue resolution procedures
- participative/consultative procedures conducted by supervisory staff within the area of managerial responsibility.

**Monitoring of activities** may include:

- review of written reports
- performance appraisal
- auditing procedures.

**Hazard** a source of potential harm or a situation with the potential to cause loss.

**Hazard identification** the process of recognising that a hazard exists and defining its characteristics.

**Existing and potential hazards** can be identified from:

- checklists
- hazard identification processes
- accident and incident reports
- significant incident reports.

**Risk** is the chance of something happening that will have an impact upon objectives. It is measured in terms of consequence and likelihood.

**Risk assessment** is the overall process of risk analysis and risk evaluation.

**Risk analysis** is a systematic use of available information to determine how often specified events might occur and the magnitude of their consequences.

**Risk evaluation** is the process used to determine risk management priorities by comparing the level of risk against predetermined standards.

**Risk control** is that part of risk management which involves the implementation of policies, standards, procedures and physical changes to eliminate or minimise adverse risks.

**Risk treatment** is the selection and implementation of appropriate options for dealing with risk.

**Incident** any unplanned event resulting in, or having a potential for injury, ill health, damage or other loss.

**Relevant statutory/legal requirements** may include:

- maintenance of records for statutory/legal breaches
- provision of information and training
- regulations and codes of practice relating to statutory/legal compliance

- site representatives and committees
- issue resolution.

**Legislative compliance** will typically involve:

- mines department/mineral resources or appropriate body
- safety and health legislative body
- environmental authority
- state/federal/local government authorities
- emergency services.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to establish and maintain the OHS system on a work site

- implementation of appropriate procedures and techniques for the efficient and effective establish and maintain the OHS system on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
  a. interpreting and communicating information on health and safety management
  b. integrating the OHS management system with other management systems
  c. defining roles and responsibilities for system management
  d. establishing and reviewing the OHS competency training programs
  e. monitoring the implementation of the system
  f. auditing and reviewing the effectiveness of the work site OHS management systems
  g. applying continuous improvement processes.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- OHS legislation, policies and codes of practice
- OHS auditing
- statutory/legal control
- duty of care
- training design and management
- emergency procedures
- strategic planning
- human resource management
- statutory and site rules, policies, procedures and regulations
- risk management processes and techniques

* action planning methods
* continuous improvement processes
* company policies.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

* access and analyse archival and historical information related to the work site safety matters

* access, interpret and apply technical OHS information

* apply and manage research techniques and activities

* audit OHS systems and recommend strategies for improvement

* communicate effectively in the workplace

* develop and introduce practices to improve the work environment

* develop and maintain risk management procedures and policies

* develop and maintain statutory/legal and organisational policies and procedures

* explain complex information to superiors/subordinates

* maintain relevant records and documents

* monitor and decide on changes to process

* provide coaching and mentoring support

* take a leading role in initiating action and making decisions

* use effective consultative mechanisms to negotiate processes and procedures appropriate to workplace safety.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

        Level 1. Perform the process/task
        Level 2. Perform and administer the process/task
        Level 3. Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed on the following page:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to assess the effectiveness of the OHS management system.

- **Communicating ideas and information** — to provide and explain information on the OHS management system and procedures in a form that is readily accessible to employees.

- **Planning and organising activities** — to ensure implementation of a training program to identify and fulfil employees' OHS training needs.

- **Working with teams and others** — to establish and maintain appropriate consultative processes.

- **Using mathematical ideas and techniques** — to develop and analyse OHS data systems.

- **Solving problems** — to evaluate the organisation's OHS management system.

- **Using technology** — to store, analyse, present and communicate OHS information.

# MNQGEN620A Establish and maintain the environmental management system

## Unit Descriptor

This unit covers the establishment and management of the *environmental management system* in an organisation. Its application is to ensure workplaces are, so far as is reasonably achievable, without risks to the environment.

### Units Replaced

This unit replaces part of the unit MNQSM02 Design, maintain and evaluate organisational risk management processes associated with occupational health and safety and environmental management systems.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1. Establish and maintain the framework for the environmental management system. | 1.1 Develop, document and have approved *policies* and *system procedures* that clearly express the organisation's commitment to *environmental management* and how relevant environmental legislation will be implemented, consistent with overall organisational policies. |
| | 1.2 Define, allocate and include in job descriptions and duty statements for all *relevant positions*, responsibilities and duties that will allow implementation and integration of the *environmental management systems*. |
| | 1.3 Identify, source and/or provide the *resources* for the operation of the environmental system in a timely and consistent manner. |
| | 1.4 Provide and explain information on *environmental management system* and *procedures* for the area of responsibility in a form readily accessible to employees. |
| 2. Establish and maintain participative arrangements for the environmental management system. | 2.1 Establish and ensure the maintenance of appropriate consultative processes, in consultation with employees and their representatives, in accordance with relevant legislation and consistent with the organisation's overall process for consultation. |
| | 2.2 Ensure issues raised through participation and *consultation* are dealt with and resolved promptly and effectively in accordance with procedures for issue resolution. |
| | 2.3 Ensure information about the outcomes of participation and *consultation* is provided in a manner accessible to employees. |

|  | **ELEMENT** |  | **PERFORMANCE CRITERIA** |
|---|---|---|---|
| 3. | Establish and maintain procedures for identifying environmental hazards. | 3.1 | Ensure existing and potential environmental *hazards* are identified and confirmed, in accordance with environmental legislation, codes of practice and trends identified from the environmental record system. |
|  |  | 3.2 | Develop and maintain *system procedures* for the ongoing identifying of existing and potential environmental *hazards* and ensure the implementation of these procedures in site procedures and systems of work. |
|  |  | 3.3 | *Monitor* activities to ensure that environmental *hazard identification* procedure is adopted effectively throughout the organisation. |
|  |  | 3.4 | Ensure procedures are in place and applied for environmental *hazard identification* at the planning, design and evaluation stages of any change in the workplace to ensure that new hazards are not created. |
| 4. | Establish and maintain procedures for assessing environmental risk. | 4.1 | Ensure appropriate *assessment of risks* presented by identified environmental *hazards* is carried out in accordance with the environmental legislation and codes of practice. |
|  |  | 4.2 | Develop a *system procedure* for ongoing *assessment of risks* and ensure its integration within site procedures and systems of and work. |
|  |  | 4.3 | *Monitor* activities to ensure that *risk assessment* procedure is adopted effectively throughout the organisation. |
|  |  | 4.4 | Ensure procedures are in place for *risk assessment* to be addressed at the planning, design and evaluation stages of any change within the organisation to ensure that risks are not created. |
| 5. | Establish and maintain procedures for treating environmental risks. | 5.1 | Develop and ensure implementation of measures to *treat assessed risks* in accordance with relevant e*nvironmental legislation*, codes of practice and trends identified from the environmental records system. |
|  |  | 5.2 | Ensure the implementation of interim solutions until a permanent control measure is developed when measures which *treat a risk* at its source are not immediately practicable. |
|  |  | 5.3 | Develop *system procedures* for ongoing *control of risks* and ensure their integration within site procedures and general systems of work. |
|  |  | 5.4 | *Monitor* activities to ensure that the *risk treatment* procedure is adopted effectively throughout the organisation. |

| | | 5.5 | Ensure *risk treatment* is addressed at the planning, design and evaluation stages of any change within the organisation to ensure that adequate risk control measures are included. |
| | | 5.6 | Identify inadequacies in existing *risk treatment* measures and seek and provide resources to enable implementation of new measures according to appropriate procedures. |
| 6. | Establish and maintain organisational procedures for dealing with hazardous environmental events. | 6.1 | Identify the range of most likely potential hazardous environmental events. |
| | | 6.2 | Develop *systems procedures* in consultation with appropriate emergency services that would treat the risks associated with the potential hazardous events that meet legislative requirements, as a minimum. |
| | | 6.3 | Provide appropriate information and training to all employees to enable implementation of the correct procedures in all relevant circumstances. |
| 7. | Establish and maintain an environmental training program. | 7.1 | Develop and ensure implementation of an environmental training program to identify and fulfil employees' environmental training needs. |
| 8. | Establish and maintain a system for environmental records. | 8.1 | Establish and *monitor* the system for keeping environmental records to allow identification of patterns of environmental non-compliance within the organisation. |
| 9. | Evaluate the organisation's environmental system and related policies, procedures and programs. | 9.1 | Assess the effectiveness of the organisation's environmental management system and related policies, procedures and programs in accordance with the organisation's goals and objectives and statutory requirements. |
| | | 9.2 | Develop and ensure implementation of improvements to the environmental management system to ensure more effective achievement of the organisation's aims with respect to the environmental management. |
| | | 9.3 | Assess compliance with *environmental legislation* and codes of practice to ensure that legal environmental standards are maintained, as a minimum. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and environmental and other relevant legislation apply to all elements and performance.

**Environmental Management System (EMS)** the part of the overall management system which includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy, and so managing the environmental risks associated with the business of the organisation.

**Environmental policy** is the statement by the organisation of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets.

**The system's procedures** are the procedures that support and expand on the policy and set out the requirements for implementing the system on individual sites. They provide direction and guidance to those responsible for implementation of the system and in the preparation of site specific work procedures, instruction and practices to put the system into effect.

**System's procedures** may include:

- identification of hazards
- risk identification
- risk assessment
- risk treatment
- interim solutions
- dealing with unplanned incidents and events
- consultation
- communication
- monitoring
- review
- record keeping
- reporting
- training.

**Relevant positions** may include:

- managers
- supervisors
- environmental officer/manager
- laboratory personnel
- all work site personnel.

**Resources** may include:

- people
- finance
- buildings/facilities
- technology
- information.

**Consultation** may include:

- environmental committees
- consultation with health and safety representatives
- issue resolution procedures

- participative/consultative procedures conducted by supervisory staff within the area of managerial responsibility.

**Monitoring** may include:

- review of written reports
- performance appraisal
- auditing procedures.

**Hazard** is a source of potential harm or a situation with the potential to cause loss.

**Hazard identification** the process of recognising that a hazard exists and defining its characteristics.

**Existing and potential hazards** can be identified from:

- site inspections
- checklists
- hazard identification processes
- hazardous event reports
- significant incident reports**.**

**Risk** is the chance of something happening that will have an impact upon objectives. It is measured in terms of consequence and likelihood.

**Risk assessment** is the overall process of risk analysis and risk evaluation

**Risk analysis** is a systematic use of available information to determine how often specified events might occur and the magnitude of their consequences.

**Risk evaluation** is the process used to determine risk management priorities by comparing the level of risk against predetermined standards.

**Risk control** is that part of risk management which involves the implementation of policies, standards, procedures and physical changes to eliminate or minimise adverse risks.

**Risk treatment** is the selection and implementation of appropriate options for dealing with risk.

**Relevant statutory/legal requirements** may include:

- maintenance of records for statutory/legal breaches
- provision of information and training
- regulations and codes of practice relating to statutory/legal compliance
- site representatives and committees
- issue resolution.

**Legislative compliance** will typically involve:

- mines department/mineral resources or appropriate body
- safety and health legislative body
- environmental authority
- state/federal/local government authorities
- emergency services.

## EVIDENCE GUIDE

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

* knowledge of procedures, requirements and instructions to establish and maintain the environmental management system in a mining organisation

* implementation of appropriate procedures and techniques for the efficient and effective establish and maintain the environmental system in a mining organisation, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

  a. interpreting and communicating information on health and safety management
  b. establishing the framework for the environmental management system
  c. integrating the environmental management system with other management systems
  d. defining roles and responsibilities for system management
  e. establishing reviewing statutory reporting procedures
  f. establishing and reviewing the competency training programs
  g. monitoring the implementation of the system
  h. monitoring and reviewing the effectiveness of the work site environmental management systems
  i. applying continuous improvement processes.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

* environmental legislation, policies and codes of practice

* environmental auditing

* statutory/legal control

* duty of care

* training design and management

* emergency procedures

* strategic planning

* human resource management

* statutory and site rules, policies, procedures and regulations

* risk management processes and techniques

* action planning methods

* continuous improvement processes

* company policies.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- access and analyse archival and historical information on work site environmental matters

- access, interpret and apply technical environmental information

- apply and manage research techniques and activities

- audit environmental systems and recommend strategies for improvement

- communicate effectively in the workplace

- develop and introduce practices to improve environmental performance in the workplace

- develop and maintain risk management procedures and policies

- develop and maintain statutory/legal and organisational policies and procedures

- explain complex information to superiors/subordinates

- maintain relevant records and documents

- monitor and decide on changes to process

- provide coaching and mentoring support

- take a leading role in initiating action and making decisions

- use effective consultative mechanisms to negotiate processes and procedures appropriate to workplace environmental performance.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no pre-requisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example: language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1. Perform the process/task

Level 2. Perform and administer the process/task

Level 3. Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to assess the effectiveness of the environmental management system.

- **Communicating ideas and information** — to provide and explain information on the environmental management system and procedures in a form that is readily accessible to employees.

- **Planning and organising activities** — to ensure implementation of a training program to identify and fulfil employees' environmental training needs.

- **Working with teams and others** — to establish and maintain appropriate consultative processes.

- **Using mathematical ideas and techniques** — to develop and analyse environmental data systems.

- **Solving problems** — to evaluate the organisation's environmental management system.

- **Using technology** — to store, analyse, present and communicate environmental information.

# MNQGEN630A Establish and maintain the quality system

## Unit Descriptor

This unit covers the establishment of quality systems for an organisation. The unit includes the requirements for designing, implementing and maintaining of the framework for the *quality system*; participative arrangements for the management of quality; procedures for identifying and assessing quality issues; designing quality treatment measures; and evaluating the organisation's quality system and related policies, procedures and programs.

### *Units Replaced*

- This unit replaces the unit MNQSM08A Design, implement, maintain and evaluate quality systems.

| ELEMENT | PERFORMANCE CRITERIA | |
|---|---|---|
| 1. Establish and maintain the framework for the quality system. | 1.1 | Develop, document and have approved *the environmental policy* and *system procedures* that clearly express the organisation's commitment to quality, consistent with the organisation's strategic goals. |
| | 1.2 | Clearly define, allocate and include responsibilities and duties that will allow implementation and integration of the quality system in job descriptions and duty statements for all *relevant positions*. |
| | 1.3 | Identify, source and/or provide the *resources* for the operation of the quality system in a timely and consistent manner. |
| | 1.4 | Provide and explain information on the *quality system* and procedures for the area of responsibility in a form that is readily accessible to employees. |
| 2. Establish and maintain participative arrangements. | 2.1 | Establish and ensure the maintenance of appropriate consultative processes, in consultation with employees and their representatives, consistent with the organisation's overall process for consultation. |
| | 2.2 | Ensure issues raised through participation and *consultation* are dealt with and resolved promptly and effectively in accordance with procedures for issue resolution. |
| | 2.3 | Ensure information about the outcomes of participation and *consultation* is provided in a manner accessible to employees. |
| 3. Establish and maintain procedures for identifying and assessing quality issues. | 3.1 | Ensure existing and potential *quality issues* are identified and confirmed in accordance with organisational policy and procedures and trends identified from the quality records system. |

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| | | 3.2 | Develop and maintain *system procedures* for the ongoing identification of existing and potential *quality issues* and ensure the implementation of these procedures in site procedures and systems of work. |
| | | 3.3 | *Monitor* activities to ensure that the procedure for ongoing identification of quality issues is adopted effectively throughout the organisation. |
| | | 3.4 | Ensure procedures are in place and applied at the planning, design and evaluation stages, of any change in the workplace to determine if any new quality system requirements are to be created. |
| 4. | Design procedures for treatment of quality issues. | 4.1 | Develop and ensure implementation of *system procedures* to *treat* quality in accordance with legislation, codes of practice and trends identified from the quality records system. |
| | | 4.2 | Develop and ensure the implementation of *system procedures* for applying interim solutions until permanent treatment measures are developed, when measures to treat quality issues at their source are not practical. |
| | | 4.3 | Develop and ensure the implementation of a *system procedure* for ongoing treatment of the quality system within site procedures and general systems of work, based on the hierarchy of control. |
| | | 4.4 | Monitor activities to ensure that control procedures are adopted effectively throughout the organisation. |
| | | 4.5 | Identify inadequacies in existing *treatment* measures and seek and provide resources to enable implementation of new measures, in accordance with appropriate procedures. |
| | | 4.6 | Develop and ensure implementation of training programs to identify and fulfil employees' quality training needs as part of the organisation's general training program. |
| 5. | Evaluate the organisation's quality system. | 5.1 | Assess the effectiveness of the *quality system* and related *policies*, procedures and programs in achieving the organisation's aims. |
| | | 5.2 | Develop and ensure implementation of improvements to the quality system to ensure more effective achievement of the organisation's aims. |
| | | 5.3 | Assess compliance with *legislation* and codes of practice to ensure that legal requirements are maintained, as a minimum. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Quality system** may include:

- quality policy
- quality system and site procedures
- site-specific work instructions
- consultative processes
- product specifications
- service standards.

**Quality policy** is the statement by the organisation of its intentions and principles in relation to its overall quality performance that provides a framework for action and for the setting of its quality objectives and developing its procedures.

**The system's procedures** are the procedures that support and expand on the policy and set out the requirements for implementing the system on individual sites. They provide direction and guidance to those responsible for implementation of the system and in the preparation of site specific work procedures, instruction and practices to put the system into effect.

**System's procedures** may include:

- allocation of responsibilities and duties
- identification of quality issues
- treating quality issues
- interim solutions
- dealing with unplanned incidents and events
- consultation
- communication
- monitoring
- review and improvement of the system
- assessment of compliance
- record keeping
- reporting
- training.

**Relevant positions** may include:

- managers
- supervisors
- quality officer/manager
- laboratory personnel
- all work site personnel.

**Resources** may include:

- people
- finance
- buildings/facilities
- technology
- information.

**Consultation** may include:

- environmental committees
- consultation with environmental and laboratory personnel
- issue resolution procedures
- participative/consultative procedures conducted by supervisory staff.

**Quality issues** are sources of potential harm or a situation with the potential to cause loss, including:

- product specification or defects
- delivery requirements
- customer service expectations.

**Existing and potential quality issues** can be identified from:

- product testing
- site inspections
- checklists
- quality issues identification processes
- non-compliance reports
- customer feedback
- sales staff feedback.

**Monitoring** may include:

- review of written reports
- performance appraisal
- auditing procedures.

**Quality issues treatment** is the selection and implementation of appropriate options for dealing with the existing or potential issue.

**Legislation requirements** may include:

- maintenance of records for statutory/legal breaches
- provision of information and training
- regulations and codes of practice relating to statutory/legal compliance
- site representatives and committees
- issue resolution.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to establish a quality system for a work site

- implementation of appropriate procedures and techniques for the efficient and effective establishment of a quality system for a work site, while complying with site risk control, health, safety, environmental and communication requirements. This will include:
  a. developing, documenting, resourcing and ensuring the quality system is implemented on operational sites
  b. monitoring and improving the implementation of the quality system.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- quality system principles and practice

- best practice principles and techniques

- industry quality benchmarks

- information collection and review techniques

- organisation's reporting requirements

- organisation's resource acquisition processes

- organisation's operations

- organisation's products and services

- organisation's plant and equipment

- problem solving techniques

- team management techniques

- consultative and participative processes

- continuous improvement principles

- organisational strategic and quality objectives

- fundamentals of contract law

- human resource policies and practices

- risk management, principles, strategies and applications

- customer/client relations techniques

- organisational change and development processes

- computer applications

- negotiation techniques

- statistics.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- design quality work procedures and practices

- develop business plans

- develop resource plans

- manage systems implementation projects and tasks

- coordinate resources — human, financial and physical

- audit the systems' performance

- implement change

- access and use appropriate technologies

- negotiate with internal/external customers, community and statutory/legal authorities

- resolve conflict

- communicate ideas and information.

## Concurrent Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a mining organisation work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.
Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.
Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as Key Competencies. The three levels at which they can be applied are:

> Level 1. Perform the process/task
> Level 2. Perform and administer the process/task
> Level 3. Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|:---:|:---:|:---:|:---:|:---:|:---:|:---:|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to prepare an operating budget.

- **Communicating ideas and information** — to involve internal and external stakeholders in the planning process.

- **Planning and organising activities** — to schedule the implementation program.

- **Working with teams and others** — to gain their input to the planning process.

- **Using mathematical ideas and techniques** — to calculate resource requirements.

- **Solving problems** — to investigate potential improvements in the quality system.

- **Using technology** — to assist in scheduling.

## MNQGEN661A Conduct feasibility study

**Unit Descriptor**
This unit covers the conduct of feasibility studies relating to work site operations. The unit includes the requirements for identifying and researching the organisation's needs, carrying out environmental scans, assessing feasibility, preparing reports, presenting findings and recommendations.

**Units Replaced**

- This unit replaces the unit MNQSM02A Conduct feasibility study.

| ELEMENT | PERFORMANCE CRITERIA | |
|---|---|---|
| 1. Identify and research organisation's needs. | 1.1 | Analyse organisation goals, objectives and strategies to gain direction as to the type of research to be undertaken. |
| | 1.2 | Investigate and analyse environments to develop options, strategies and anticipated outcomes. |
| | 1.3 | Prepare research brief that clearly states the objectives and outcomes, and the requirements for presentation of information. |
| | 1.4 | Develop and implement strategies that translate the objectives into the planning process. |
| 2. Carry out environmental investigation. | 2.1 | Establish information requirements and identify and access sources. |
| | 2.2 | Establish strategies and systems to support analysis of the environment. |
| | 2.3 | Scan the environment to identify and assess the factors that impact on site development. |
| | 2.4 | Identify and explore market opportunities to assist the organisation to forecast trends and options. |
| | 2.5 | Determine quantity and quality of *resources*. |
| | 2.6 | Identify and analyse threats and opportunities and used to optimise project outcomes. |
| | 2.7 | Undertake titles search. |
| | 2.8 | Identify and document *legislative and organisation's requirements*. |
| 3. Assess feasibility. | 3.1 | Estimate *resource* requirements and utilisation to reflect customer requirements, the organisation's business plans and the cost to the organisation of providing the products and services. |
| | 3.2 | Review and update information to ensure appropriate data is gathered to assess project viability. |
| ELEMENT | PERFORMANCE CRITERIA | |
| | 3.3 | Seek preliminary opinion from legislative and regulative bodies. |
| 4. Prepare report and | 4.1 | Prepare preliminary reports for management briefings. |

| | | |
|---|---|---|
| present findings/ recommendations. | 4.2 | Document recommendations for future action and agreement gained by stakeholders. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Legislative and organisation requirements** may include:

- risk management
- statutory compliance
- development approval, mining licences (or equivalent), which may include:
  - OHS
  - environmental
  - quality
  - purchasing
  - contract management
  - administration (including records and reports).

**Resources** may include:

- people
- buildings/facilities
- finance
- equipment
- environment
- technology
- information
- time.

Evaluation of financial implications can be done by such techniques as:

- cost benefit analysis
- pay back period
- discounted cash flow and net present value.

**Financial feasibility** can include:

- project operating cost
- running parameters of new/existing equipment and plant
- infrastructure development costs.

## EVIDENCE GUIDE

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to conduct a feasibility study in a mining operation

- implementation of appropriate procedures and techniques for the efficient and effective conduct of a feasibility study in a mining operation, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

  a. establishing of the organisation's needs relevant to the specific project
  b. identification of the relevant information that will impact on the feasibility of the specific project
  c. identification of a solution that is supported by the evidence and meets the organisation's needs
  d. a report that clearly documents the options considered and justifies the recommendation.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- mining operations

- mining products and services

- mining plant and equipment

- team management

- quality assurance principles

- statutory/legal control

- organisational objectives

- resource quantification

- financial models

- fundamentals of law and contract law

- human resource policies and practices

- industrial awards/enterprise agreements

- business planning

- risk management: principles, strategies and applications

- customer/client relations

- organisational change and development

- environmental management

- OHS

- computer applications

- negotiation techniques.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- monitor and maintain quarry plant and equipment

- manage people and processes

- prepare feasibility proposals

- develop business plans

- prepare operating budgets and forecast trends

- analyse and review production costs versus equipment/plant operating costs

- interpret survey data

- interpret geological data

- manage projects and tasks

- evaluate new and used equipment using appropriate techniques

- control operating costs

- gain statutory/legal approvals

- prepare tender specifications

- negotiate and finalise contracts

- implement change

- access and use appropriate technologies

- prepare and present management reports

- negotiate with internal/external customers, community and statutory/legal authorities

- resolve conflict.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.   Perform the process/task
Level 2.   Perform and administer the process/task
Level 3.   Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to prepare feasibility study.

- **Communicating ideas and information** — to involve internal and external stakeholders in the assessment process.

- **Planning and organising activities** — to schedule the data collection program.

- **Working with teams and others** — to gain their input to the assessment process.

- **Using mathematical ideas and techniques** — to calculate resource requirements.

- **Solving problems** — to develop solutions to potential constraints.

- **Using technology** — to record and analyse data.

# MNQGEN662A Establish operational performance management system

**Unit Descriptor**

This unit covers the establishing of operational performance management systems in organisations. The unit includes the requirements for identifying and researching the organisation's needs, preparing business plans and budgets, designing and implementing performance indicators, and monitoring and reviewing performance.

***Units Replaced***

- This unit replaces the unit MNQSM07A Design and implement operational performance management system.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Identify and research organisation's needs. | 1.1 | Analyse organisation goals, objectives and strategies to gain direction as to the type of research to be undertaken. |
| | | 1.2 | Investigate and analyse site environments to develop options, strategies and anticipated outcomes. |
| | | 1.3 | Clearly state in research briefs the objectives and outcomes, and the requirements for presentation of information. |
| | | 1.4 | Develop and implement strategies that translate the objectives into the planning process. |
| | | 1.5 | *Evaluate* existing system and equipment suitability taking into account operational requirements, and *legislative and organisation's requirements*. |
| | | 1.6 | Research, *evaluate*, select and purchase new systems in line with operational and budget requirements, *legislative and organisation's requirements*. |
| | | 1.7 | Analyse and interpret research information to establish options and opportunities. |
| 2. | Prepare business plans/budgets. | 2.1 | Involve internal and external *stakeholders* in the planning process in a way that uses their contribution effectively and gains their support for the outcomes. |
| | | 2.2 | Prepare and present business plans/budgets including contingency plans in accordance with the organisation/s guidelines and requirements. |
| | | 2.3 | Prepare plans that contain a clear statement of priorities and schedules. |
| | | 2.4 | Provide optional strategies in the contingency plans in the event that the full *resource* requirement is not secured or the situation changes. |
| | | 2.5 | Identify *resource* implications of the plans and strategies are devised for their acquisition and use. |
| | | 2.6 | Develop implementation plans and schedules in line with operational requirements and agreed to by all stakeholders. |
| 3. | Design and implement performance indicators. | 3.1 | Set and agree to operating targets. |
| | | 3.2 | Establish and monitor systems against human/financial/ physical performance targets. |

|   |   |   |   |
|---|---|---|---|
|   |   | 3.3 | Establish and gain agreement on reporting mechanisms. |
| 4. | Monitor and review performance. | 4.1 | Interpret and analyse financial/human and physical information to monitor the relationship between budget/forecast/past performance and actual performance. |
|   |   | 4.2 | Prepare and gain agreement on operating budgets by relevant stakeholders. |
|   |   | 4.3 | Establish systems to monitor financial/human and physical performance using appropriate technology. |
|   |   | 4.4 | Identify variations in performance and take action to rectify out of specification results. |
|   |   | 4.5 | Make recommendations regarding future planning within the organisation's continuous improvement processes. |
|   |   | 4.6 | Produce and analyse management reports in accordance with company/auditors requirements. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Legislative and organisation's requirements** may include:

- risk management
- statutory compliance
- development approval, mining licences (or equivalent), which may include:
  - OHS
  - environmental
  - quality
  - purchasing
  - contract management
  - administration (including records and reports).

**Stakeholders** may include:

- regulatory authorities
- tenderers
- operating managers
- project managers
- contractors
- employees
- community
- suppliers
- customers.

**Resources** may include:

- people
- buildings/facilities
- finance
- equipment
- power/energy
- technology
- information
- time.

**Evaluation** may include:

- cost-benefit analysis
- pay-back period
- discounted cash flow and net present value.


**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to mining operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to establish the operational performance management system in a mining operation

- implementation of appropriate procedures and techniques for the efficient and effective establishment of the operational performance management system in a mining operation, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
  a. identification and documentation of relevant organisational policies and strategies for the establishing of the operational performance management systems
  b. preparation and issuing of a instructions on the implementation of the operational performance management system that is capable of achieving all of organisation's needs
  c. identifying and arrange the availability of the required resources for the safe, efficient and effective execution of the system
  d. providing sound leadership and supervision of team in undertaking the implementation of the system.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- mining operations
- mining products and service
- mining plant and equipment

- team management
- quality system
- statutory/legal control
- organisational objectives
- resource quantification
- financial models
- fundamentals of contract law
- human resource policies and practices
- industrial awards/enterprise agreements
- business planning
- risk management: principles, strategies and applications
- customer/client relations
- organisational change and development
- environmental management
- OHS
- computer applications
- negotiation techniques.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- monitor mining plant and equipment performance and maintenance
- manage people and processes
- develop business plans
- prepare operating budgets and forecast trends
- analyse and review production costs and equipment/plant operating costs
- manage projects and tasks
- coordinate resources — human, financial and physical
- control operating costs
- gain statutory/legal approvals
- prepare tender specifications
- implement change
- access and use appropriate technologies
- prepare and present management reports
- negotiate with internal/external customers, community and statutory/legal authorities
- resolve conflict.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency. Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.     Perform the process/task
Level 2.     Perform and administer the process/task
Level 3.     Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to identify the organisation's performance management needs.
- **Communicating ideas and information** — to involve stakeholders in the planning process.
- **Planning and organising activities** — to schedule the implementation program.
- **Working with teams and others** — to gain their input and commitment to the system.
- **Using mathematical ideas and techniques** — to establish the performance analysis.
- **Solving problems** — to investigate variations in performance.

**Using technology** — to document, communicate, collect and analyse performance data.

# MNQGEN663A Initiate, monitor and supervise contracts

## Unit Descriptor

This unit addresses the planning, tender preparation, *evaluation*, contract negotiation and the monitoring and supervision of contracts. Its application is to ensure the establishment, implementation and maintenance of a business relationship between the mining operation and external parties, together with the determination of the guidelines governing the conduct of the parties.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Scope, plan and prepare for contracts. | 1.1 | Define areas/work for contracting. |
| | | 1.2 | Define and plan for stages of *contract preparation* and implementation. |
| | | 1.3 | Undertake *site inspections* in accordance with enterprise requirements. |
| | | 1.4 | Identify and specify roles and responsibilities of all relevant individuals and groups. |
| 2. | Prepare specifications and tenders. | 2.1 | Define the work to be tendered. |
| | | 2.2 | Establish standards and conditions to be met by tenderers. |
| | | 2.3 | Evaluate the enterprises standard tender *documentation* and modify it to suit the tender. |
| | | 2.4 | Define the procedural steps of the tender and consequential contract. |
| | | 2.5 | Write the tender document and ensure it is ready for distribution and advertising. |
| 3. | Evaluate tenders and negotiate and award contract. | 3.1 | Identify *tenders* received not in accordance with the conditions of tendering and with inaccurate information. |
| | | 3.2 | Identify tenders of unusually high and low rates. |
| | | 3.3 | Prepare a short list of appropriate tenderers. |
| | | 3.4 | Assess the financial position, past performance and insurance credentials of prospective contractors. |
| | | 3.5 | Identify prospective contractors understanding the nature, volume of works and site conditions. |
| | | 3.6 | Evaluate the current commitments of prospective contractors and their ability to complete works within practical time lines. |
| | | 3.7 | Evaluate the OHS aspects of prospective contractors. |
| | | 3.8 | Clarify and *negotiate* details and any uncertainty of tenders. |

|  **ELEMENT** | | **PERFORMANCE CRITERIA** |
|---|---|---|
| | 3.9 | Write an evaluation report of tenders with recommendation of a contractor. |
| | 3.10 | Advise successful and unsuccessful tenders. |
| 4. Evaluate tenders and negotiate and award contract. | 4.1 | Supervise construction or installation sites. |
| | 4.2 | Coordinate materials procurement. |
| | 4.3 | Evaluate contract conditions in line with work progress. |
| | 4.4 | *Negotiate* contract variations. |
| | 4.5 | Monitor activities in accordance with *legislative requirements*, enterprise and contractor requirements. |
| 5. Finalise contract. | 5.1 | Finalise outstanding claims. |
| | 5.2 | Monitor and finalise repair work of defects/liabilities. |
| | 5.3 | Release detention monies. |
| | 5.4 | Prepare and "signed off" final certificate and other documentation. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Contract preparation** may include:

- specifications
- schedules
- phasing
- services and facilities
- site inspection and requirements
- potential contractors.

**Site inspections** may be conducted to:

- confirm planning
- inspect preparation work
- assess compliance with specifications
- assess OHS requirements and compliance.

**Evaluation of tenders or contracts** may include:

- schedules evaluation
- investigation of prospective contractors.

**Tenders** may be:

- from external applicants

- internal.

**Documents** may include:

- specifications
- briefs
- drawings
- pricing schedules
- instruments of agreement
- acceptance
- general conditions
- permits
- tenders
- plans of other utilities
- project plan.

**Legislative requirements** may include:

- OHS
- environmental
- common law
- dangerous goods
- industrial relations
- industry licensing
- local government
- mines act
- navigation
- planning and assessment
- trade practices
- waterways
- weights and measures
- workers compensation/WorkCover
- requirements for the maintenance of records for statutory/legal breaches
- provision of information and training
- site representatives and committees
- issue resolution.


**Negotiations** may be:

- formal or informal
- short term or ongoing
- multi-lingual and cross-cultural

- enterprise agreements

- legislation regulation compliance and include relative authorities, project managers, employees, contractors, customers and the community.


**EVIDENCE GUIDE**

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to mining operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to initiate, monitor and supervise contracts on in mining operations

- implementation of appropriate procedures and techniques for the efficient and effective initiating, monitoring and supervision of contracts in mining operations, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
  a. prepare tenders
  b. evaluate tenders
  c. identify, assess, investigate and report departures from contractual requirements
  d. monitor contract work procedures and progress
  e. supervise contract activities
  f. finalise all contract activities.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- enterprise tendering procedures

- enterprise contract procedures

- enterprise contract completion processes

- site inspection procedures

- investigation procedures

- evaluation and investigation requirements

- enterprise reporting procedures

- reporting requirements

- characteristics, technical capabilities and limitations of relevant materials

- material handling procedures

- relevant legislation

- occupational health, safety and environmental legislation acts and procedures.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- contribute to planning processes

- monitor work progress

- order materials

- apply relevant legislation

- conduct investigations

- conduct site inspections

- prepare reports

- manage work effectively to achieve goals and results

- take a leading role in initiating actions and making decisions

- clearly identify what is required of others

- maintain a focus on objectives.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

### Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example: language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.     Perform the process/task
Level 2.     Perform and administer the process/task
Level 3.     Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|:---:|:---:|:---:|:---:|:---:|:---:|:---:|
| 3 | 3 | 2 | 3 | 2 | 3 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to scope and plan to prepare and implement the contract.

- **Communicating ideas and information** — to clarify and negotiate details and any uncertainty of tenders.

- **Planning and organising activities** — to evaluate tenders.

- **Working with teams and others** — to monitor activities in accordance with occupational health, safety, environmental, legislative, enterprise and contractor requirements.

- **Using mathematical ideas and techniques** — to assess the financial position, past performance and insurance credentials of prospective contractors.

- **Solving problems** — to finalise outstanding claims.

- **Using technology** — to prepare final certificate and other documentation.

# MNQGEN664A Conduct business negotiations

## Unit Descriptor

This unit covers the conduct of the operations business *negotiations*. Its application involves reviewing the business's objectives and strategies to maximise results.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1. Establish and confirm the work site's business objective(s). | 1.1 Identify and target business opportunities available to the operations. |
| | 1.2 Facilitate discussions with *stakeholders* to provide strategies and ideas to meet outcome(s). |
| | 1.3 Analyse information to allow for assessment of the short-term and long-term position of the business. |
| | 1.4 Ensure agreed decisions and recommendations fall within the operations business objectives, *legislative requirements* and are appropriate to desired outcomes. |
| 2. Conduct business negotiations. | 2.1 *Consult* and/or lobby key *stakeholders* who can assist achievement of the outcome(s). |
| | 2.2 Ensure preparation for the meeting is sufficient to enable effective business *negotiation* and to achieve desired outcome(s). |
| | 2.3 Ensure contributions to the *negotiations* are clear, concise and relevant which help to achieve business objective. |
| | 2.4 Document/record appropriate and accurate records and key outcomes of *negotiations*. |
| 3. Evaluate negotiation outcomes. | 3.1 Evaluate outcomes of *negotiations*. |
| | 3.2 Refer outcomes of negotiations to stakeholders who assisted in preparation of strategies. |
| | 3.3 Review outcomes of negotiations for improvement. |
| | 3.4 Follow up, and circulate as necessary, outcomes and decisions. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Negotiations** may be with a variety of internal or external parties and be:

- formal or informal
- short term or ongoing
- multi-lingual and cross-cultural.

**Stakeholders** may include:

- regulatory authorities
- tenderers
- project managers

- contractors
- employees
- community
- customers
- suppliers.

**Legislative requirements** may include:

- common law
- dangerous goods
- industrial relations
- industry licensing
- local government
- mines act
- navigation
- planning and assessment
- trade practices
- waterways
- weights and measures
- workers compensation/WorkCover
- requirements for the maintenance of records for statutory/legal breaches
- provision of information and training
- regulations and codes of practice relating to statutory/legal compliance
- site representatives and committees
- issue resolution.

**Consultation is seeking people's views on particular issues** and may include:

- committees
- consultation with statutory/legal authorities
- consultation with industrial representatives
- consultation with agencies/site representatives
- issue resolution procedures and participative/consultative procedures conducted by supervisory staff within the area of managerial responsibility.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to the operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to conduct business negotiations in the operations
- implementation of appropriate procedures and techniques for the efficient and effective conduct of business negotiations in the operations, while complying with site

risk control, health, safety, environmental, quality and communication requirements. This will include:

a. effectively analyse the external environment for business opportunities
b. develop their negotiation strategy
c. plan and prepare for business negotiations
d. identify possible outcomes
e. consult and lobby key stakeholders
f. develop business strategies
g. participate in and influence negotiations
h. evaluate the outcomes.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- advanced written and oral communication methods

- organisational goals and objectives

- subject/product knowledge

- assertive techniques

- advanced negotiation skills

- receptive listening skills

- statutory and site rules, policies, procedures and regulations

- work site operating procedures

- risk management processes and techniques

- risk control and management systems

- reporting and recording procedures

- access, evaluate and apply data from organisational systems

- action planning methods.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- take a leading role in initiating action and making decisions

- establish the rules of procedure

- adopt communications styles appropriate to listeners and situations, including selecting an appropriate time and place

- identify the information needs of participants

- listen actively, ask questions, clarify points and rephrase others' statements to check mutual understanding

- prioritise objectives and schedule work to make best use of time and resources

- modify communications in response to feedback from participants

- actively encourage the free exchange of information

- produce a variety of solutions before taking a decision

- show respect for the views and actions of others

- encourage participants to ask questions or rephrase statements to clarify their understanding

- encourage decisions which are realistic for the situation

- produce own ideas from experience and practice

- reconcile and make use of a variety of perspectives when making sense of a situation

- actively build relationships with others

- present yourself positively to others.

## Assessment and Interdependence of Units
This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units
There are no prerequisite units for this unit.

## Resource Implications
Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance
To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment
This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example: language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment
Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

> Level 1.  Perform the process/task
> Level 2.  Perform and administer the process/task
> Level 3.  Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|:---:|:---:|:---:|:---:|:---:|:---:|:---:|
| 3 | 3 | 2 | 3 | 2 | 3 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to identify and target business opportunities.

- **Communicating ideas and information** — to consult and/or lobby key stakeholders.

- **Planning and organising activities** — to conduct business negotiations.

- **Working with teams and others** — to evaluate outcomes of negotiations.

- **Using mathematical ideas and techniques** — to records are accurate.

- **Solving problems** — to ensure agreed decisions and recommendations fall within work site's business objectives.

- **Using technology** — to document outcomes of negotiations.

# MNQOPS403A Apply site plant and resource management plan

**Unit Descriptor**

This unit covers the application of the site plant and resource management plan in a work site operation. It includes the requirements for planning, preparing for and initiating site plant and resource management activities and monitoring, adjusting and reporting on the execution of the plant and resource management plan.

| ELEMENT | | PERFORMANCE CRITERIA |
|---|---|---|
| 1. Plan, prepare for and initiate site plant and resource management activities. | 1.1 | Access and share with team members the *legislative site, and manufacturer's requirements and procedures* relevant to the undertaking and completion of site plant and resource management activities. |
| | 1.2 | Access and share with team members the *geological, hydrological and survey data* required to complete the site plant and resource management activities. |
| | 1.3 | Prepare an action plan, in consultation with team members, which makes best use of the available resource and takes into account the requirements of the *site plant and resource management plan* and other relevant legislative, site and manufacturer's requirements and procedures. |
| | 1.4 | Acquire and make available the necessary *resources* for the safe, effective and efficient conduct of site plant and resource management activities in accordance with the site plant and resource management plan and other relevant legislative, site and manufacturer's requirements and procedures. |
| | 1.5 | Issue clear and timely *instructions* to team members and others involved for the safe, effective and efficient conduct in the site plant and resource management activities in accordance with the site plant and resource management plan and other relevant legislative, site and manufacturer's requirements and procedures. |
| 2. Monitor, adjust and report on execution of the site plant and resource management plan. | 2.1 | Ensure safe, effective and efficient execution of activities in accordance with the site plant and resource management plan and other relevant legislative, site and manufacturer's requirements and procedures. |
| | 2.2 | Monitor site plant and resource management plan performance to ensure achievement of planned outcomes. |
| | 2.3 | Initiate adjustments to work programs to take into account non-achievement of planned outcomes. |
| | 2.4 | Complete and submit reports as required by the site plant and resource management plan and other relevant legislative and site requirements and procedures. |

| ELEMENT | PERFORMANCE CRITERIA |
|---------|----------------------|
|         | 2.5 Recommend changes to improve the safety, efficiency and effectiveness of the site plant and resource management plan. |

**RANGE STATEMENT**

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Legislative, site and manufacturer's requirements and procedures** may include:

- risk management

- statutory compliance

- OHS

- environmental

- quality

- communications

- purchasing

- contact management

- administration (including records and reports)

- maintenance, servicing, lubricating and housekeeping.

**Geological data** may include relevant site-specific information in relation to:

- rock type and characteristics

- faults and joints

- water tables or other water sources.

**Hydrological data** may include:

- rainfall

- surface water, existing streams and dams

- catchment areas and runoff characteristics

- groundwater and bores.

**Survey data** may include relevant site-specific information in relation to:

- floor heights

- bench widths

- grades

**The site plant and resources management plan** may cover:

- people

- raw feed reserves

- water and soil

- mobile plant and equipment

- processing plant and equipment

- maintenance equipment and materials

- fuel, oil and lubricants

- explosives and blasting accessories

- roads, pavements, land and building.

**Plant and resource management** may include:

- security requirements

- preserve the value of assets

- maintenance requirements

- minimising wastage

- preserving development consent.

**Resources** may include:

- labour

- materials

- services

- equipment.

**Instructions may be issued in briefings, handovers, and work orders** and may include:

- nature and scope of tasks

- achievement targets

- operational conditions

- obtaining permits required

- site layout

- out of bounds areas

- work site inspection requirements

- lighting conditions

- plant or equipment defects

- hazards and potential hazards

- coordination requirements or issues.


**EVIDENCE GUIDE**
# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to apply the plant and resource management plan on a work site

- implementation of appropriate procedures and techniques for the efficient and effective application of the plant and resource management plan on a work site, while

complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

a. preparation and issuing of an action plan that reflects the requirements of the site plant and resource management plan and is capable of achieving all of its planned outcomes
b. sourcing and making available adequate resources for the safe, efficient and effective execution of the plan
c. providing sound leadership and supervision of team in undertaking the tasks to achieve the plan
d. the successful application of the plan.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- site risk, statutory compliance, health, safety, environmental, quality and communication requirements and procedures

- site plant and resource management plan

- team leadership techniques

- operational techniques required for execution of the plan

- plant and equipment capabilities

- work planning techniques

- work monitoring methods.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- provide team leadership

- chose appropriate operational techniques

- chose and assign appropriate plant and equipment

- develop and administer work plans.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- oral and/or written questioning on required knowledge and skills
- testimony from supervisors, colleagues, clients and/or other appropriate persons
- inspection of the final product or outcome
- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1. Perform the process/task
Level 2. Perform and administer the process/task
Level 3. Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to obtain information and advise colleagues of site plant and resource management plan requirements.

- **Communicating ideas and information** — to resolve site plant and resource management plan issues with work team.

- **Planning and organising activities** — to plan operational activities.

- **Working with teams and others** — to consult on application of the site plant and resource management plan.

- **Using mathematical ideas and techniques** — to calculate resource requirements.

- **Solving problems** — to investigate potential improvements in plan application.

- **Using technology** — to use information systems to access and record plan information.

# MNQOPS413A Conduct shot firing

**Unit Descriptor**

This unit covers work-site surface blast shot firing and applies solely to on site activities. It includes planning for blasting, preparing for charging, storing and transporting explosives on the blast area, loading and firing shots, completing shot firing operations, and carrying out equipment maintenance.

*Units Replaced*

- This unit replaces the units MNQOP32A Carry out shot firing.

The work covered in this unit is relevant to Australian Standard AS/NZS 2187 series.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Plan for blasting. | 1.1 | Access, interpret and clarify *legislative and site requirements and procedures*. |
| | | 1.2 | Receive, interpret and clarify *shot firing requirements* and confirm by preliminary site inspection. |
| | | 1.3 | Identify *potential hazards,* assess risks and ensure work area is safe. |
| | | 1.4 | Access, interpret and apply atmospheric, geological, drilling logs and survey data required to complete the allocated work in accordance with site requirements. |
| | | 1.5 | Apply basic calculations for shot firing operations to verify the blast design criteria. |
| | | 1.6 | Identify and confirm the *explosives* and *accessories* required. |
| | | 1.7 | Co ordinate support requirements in accordance with legislative and site requirements and procedures. |
| | | 1.8 | Select appropriate personal protective equipment and environmental monitoring equipment. |
| 2. | Prepare for charging. | 2.1 | Identify, manage and report potential hazards and risks. |
| | | 2.2 | *Secure blast area* in accordance with legislative and site requirements and procedures. |
| | | 2.3 | Establish and communicate access routes to blast area for authorised persons and vehicles. |
| | | 2.4 | Identify hole locations and any non-conforming conditions in preparation for charging. |
| | | 2.5 | Establish stemming stockpile(s) and accessories on shot site. |
| 3. | Store and transport explosives on the blast area. | 3.1 | Store and transport explosives in accordance with legislative and site requirements and procedures. |
| | | 3.2 | Deliver explosives and accessories to blast area and segregate in accordance with legislative and site requirements and procedures. |
| | | 3.3 | Ensure that explosives are not left unattended, in accordance with legislative and site requirements and procedures. |

| | | | |
|---|---|---|---|
| 4. | Load shot. | 4.1 | Prepare and mix bulk explosives in accordance with legislative and site requirements and procedures. |
| | | 4.2 | Prime and charge holes in accordance with the blast plan. |
| | | 4.3 | Ensure blast holes are charged in accordance with loading plan and identify non-conforming conditions. |
| | | 4.4 | Check and adjust charges as required to ensure compliance with the blast plan. |
| | | 4.5 | Stem blast holes in accordance with blast plan and legislative and site requirements and procedures. |
| | | 4.6 | Connect surface detonation system in accordance with blast plan and legislative and site requirements and procedures. |
| 5. | Prepare for and initiate blast. | 5.1 | Identify, communicate and coordinate with blast crew and sentries, the details of scheduled blast and confirm their understanding. |
| | | 5.2 | Carry out *pre-blasting procedures* in accordance with legislative and site requirements. |
| | | 5.3 | Activate blast monitoring system and monitor blast in accordance with legislative and site requirements. |
| | | 5.4 | Initiate blast in accordance with legislative and site requirements and procedures. |
| | | 5.5 | Supervise all personnel within the blast area in accordance with legislative and site requirements and procedures. |
| | | 5.6 | Carry out and record activities in accordance with the blast plan and legislative and site requirements and procedures. |
| | | 5.7 | Ensure the use of selected personal protective equipment by all persons as required. |
| | | 5.8 | In the event that the blast schedule is delayed, record and report situation to management and other relevant persons in accordance with legislative and site requirements and procedures. |
| 6. | Complete shot firing operations. | 6.1 | Carry out post blast inspection in accordance with site procedures. |
| | | 6.2 | Deal with misfires in accordance with legislative and site requirements and procedures. |
| | | 6.3 | Declare area safe for re-entry. |
| | | 6.4 | Carry out *post blast coordination* in accordance with legislative and site requirements and procedures. |
| | | 6.5 | Flag large rocks for further fragmentation. |
| | | 6.6 | Complete reports in accordance with legislative and site requirements and procedures. |

| | | | |
|---|---|---|---|
| 7. | Carry out equipment maintenance. | 7.1 | Carry out inspection and required *maintenance* after shot firing operations in accordance with legislative and site requirements and procedures. |

## RANGE STATEMENT

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Legislative and site requirements and procedures** may include:

- explosives legislation for relevant State or Territory

- mining, safety and health legislation for relevant State or Territory

- dangerous goods legislation for relevant State or Territory

- major hazard facility legislation for relevant State or Territory

- OHS legislation for relevant State or Territory

- Local Government legislation

- common law

- criminal law

- development consent (or equivalent) conditions

- environmental legislation

- organisation's policies and procedures on all or some of these.

**Shot firing requirements** may include:

- blast plan — including location

- equipment required

- security measures and procedures

- monitoring requirements

- type and quantity of explosives and initiation methods

- wet or dry holes

- stemming material.

**Potential hazards** may include:

- ground conditions

- tipping hazards

- fire/flames

- not following safety precautions near an open stope

- broken detonation leads

- premature explosion

- atmospheric contaminants

- debris

- faulty equipment

- air blast and fly rock

- high air and water pressures

- high voltage electricity

- lack of ventilation

- unauthorised personnel

- wet holes

- uncontrolled radio frequencies and transmitters

- EMF hazards (e.g. static electricity, lightning)

- hot ground

- lost holes

- drilling in butts

- drilling into misfires

- dust

- noise.

**Explosives** may include:

- wet or dry

- variable density

- packaged

- free flowing or bulk

- bulk

- primers

- delays

- downlines

- trunklines

- lead-in lines

- detonators and detonating cord.

**Accessories** may include:

- gas bags

- decking material

- stemming

- hole liners

- blast monitoring equipment

- firing cables/bell wire

- exploders and testers

- electronic firing equipment.

**Securing the blast area** may include:

- signage

- windrows

- bund walls

- ribbons

- tapes

- witches hats

- ropes

- flags or pegs

- sentries

- gates.

**Pre-blasting procedures** may include:

- issuing of warnings

- placement of sentries

- inspection and clearance of the area

- positioning stemming

- cleaning up

- checking the weather

- ensuring adequacy of fencing/signage and access routes

- marking/hole identification

- measuring holes

- dewatering holes

- applying plugs (to seal finished holes prior to loading)

- using measuring tape

- using cutting implements

- setting up and testing blast monitoring systems

- setting up video camera

- hooking up the blast

- testing the circuit.

**Post-blast coordination** may include:

- the return of unused explosives

- the return of other equipment

- the withdrawing sentries

- collection of environmental monitoring equipment

- recording of environmental monitoring data.

**Maintenance** may include:

- testing of exploders

- servicing of mixing equipment

- maintenance of hand tools

- operational maintenance of bulk delivery equipment.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to fire shots on a work site

- implementation of appropriate procedures and techniques for the efficient and effective firing of shots on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

  a. conducting an activity safely and efficiently

  b. achieving quality and productivity targets

  c. adhering to and understanding relevant legislative (State/Federal) requirements

  d. adhering to and understanding environmental and heritage issues.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- Australian codes and standards (e.g. AS/NZS 2187 series)

- site shot firing procedures

- explosives and safety and health legislation

- emergency procedures

- environmental procedures

- equipment processes, technical capability and limitations

- equipment safety requirements

- basic geological and technical information

- blast plans

- hazardous goods procedures (handling and transport)

- isolation and lock out procedures

- labelling procedures

- manufacturers instructions

- management systems

- safe operating procedures

- risk management including application of appropriate controls to identify risks

- site procedures

- job safety analysis

- start up and shut down procedures

- explosives storage procedures

- types and characteristics of blasting agents, explosives and initiation systems.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- selection and use of personal protective equipment

- plan and document reading

- communications by electronic, radio and other means

- blasting preparation techniques

- hazard identification

- hazardous substances handling techniques

- mathematical calculations

- diagnostic techniques.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job. For advice on ways of ensuring fairness and validity of assessment, please refer to the Training Package Assessment Guidelines.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1. Perform the process/task
Level 2. Perform and administer the process/task
Level 3. Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to plan for blasting.

- **Communicating ideas and information** — to coordinate support requirements.

- **Plan and organise activities** — to loading and firing shots.

- **Working with teams and others** — to load and fire shots.

- **Using mathematical ideas and techniques** — to verify the blast design criteria.

- **Solving problems** — to identify solutions to non-conforming conditions.

- **Using technology** — to test circuits and initiate the blast.

# MNQOPS450A Apply site plant, equipment and infrastructure maintenance management plan

## Unit Descriptor

This unit covers the application of the plant, equipment and infrastructure maintenance management plan in a work site operation. It includes the requirements for planning, preparing for and initiating site plant, equipment and infrastructure maintenance management tasks and monitoring, adjusting and reporting on the execution of the plant, equipment and infrastructure maintenance management plan.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1. Plan, prepare for and initiate site plant, equipment and infrastructure maintenance management. | 1.1 Access and share with team members the *legislative site, and manufacturer's requirements and procedures* relevant to the undertaking and completion of site plant, equipment and infrastructure maintenance management tasks. |
| | 1.2 Access and share with team members the *geological and survey data* required to complete the site plant, equipment and infrastructure maintenance management tasks. |
| | 1.3 Prepare an action plan, in consultation with team members, which makes best use of the available resource and takes into account the requirements of the *site plant, equipment and infrastructure maintenance management plan* and other relevant legislative, site and manufacturer's requirements and procedures. |
| | 1.4 Acquire and make available the necessary *resources* for the safe, effective and efficient conduct of site plant, equipment and infrastructure maintenance management task in accordance with the site plant, equipment and infrastructure maintenance management plan and other relevant legislative, site and manufacturer's requirements and procedures. |
| | 1.5 Issue clear and timely *instructions* to team members and others involved for the safe, effective and efficient conduct in the site plant, equipment and infrastructure maintenance management tasks in accordance with the site plant, equipment and infrastructure maintenance management plan and other relevant legislative, site and manufacturer's requirements and procedures. |
| 2. Monitor, adjust and report on execution of the site plant, equipment and infrastructure maintenance management plan. | 2.1 Ensure safe, effective and efficient execution of tasks in accordance with the site plant, equipment and infrastructure maintenance management plan and other relevant legislative, site and manufacturer's requirements and procedures. |
| | 2.2 Monitor site plant, equipment and infrastructure maintenance management plan performance to ensure achievement of planned outcomes. |

2.3 Initiate adjustments to work programs to take into account non-achievement of planned outcomes.

2.4 Complete and submit reports as required by the site plant, equipment and infrastructure maintenance management plan and other relevant legislative and site requirements and procedures.

2.5 Recommend changes to improve the safety, efficiency and effectiveness of the site plant, equipment and infrastructure maintenance management plan.

## RANGE STATEMENT

The following range of variables is subject to site specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Legislative, site and manufacturer's requirements and procedures** may include:

- risk management
- statutory compliance
- OHS
- environmental
- quality
- communications
- purchasing
- contact management
- administration (including records and reports)
- maintenance, servicing, lubricating and housekeeping.

**Geological data** may include relevant site-specific information in relation to:

- rock type and characteristics
- faults and joints
- water tables or other water sources.

**Survey data** may include relevant site-specific information in relation to:

- floor heights
- bench widths
- grades.

**Plant, equipment and infrastructure maintenance** may include:

- preserve the value of assets
- maintenance or serviceability.

**The site plant, equipment and infrastructure maintenance plan** may include:

- scheduling requirements
- limitation on tasks to be performed by site personnel

- nominated suppliers

- oil sampling requirements

- housekeeping requirements

- cleaning requirements

- waste disposal requirements

- maintenance of records

- inspection requirements

- stock take techniques and requirements

- risk, statutory compliance, health, safety, environmental, quality and communication requirements.

**Resources** may include:

- labour

- materials

- services

- equipment.

**Instructions may issued in briefings, handovers, and work orders** and may include:

- nature and scope of tasks

- achievement targets

- operational conditions

- obtaining permits required

- site layout

- out of bounds areas

- work site inspection requirements

- lighting conditions

- plant or equipment defects

- hazards and potential hazards

- coordination requirements or issues.

**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to apply the plant, equipment and infrastructure maintenance management plan on a work site

- implementation of appropriate procedures and techniques for the efficient and effective application of the plant, equipment and infrastructure maintenance management plan on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

a. preparation and issuing of an action plan that reflects the requirements of the site plant, equipment and infrastructure maintenance management plan and is capable of achieving all of its planned outcomes
b. sourcing and making available adequate resources for the safe, efficient and effective execution of the plan
c. providing sound leadership and supervision of team in undertaking the tasks to achieve the plan
d. the successful application of the plan.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- site risk, statutory compliance, health, safety, environmental, quality and communication requirements and procedures

- the site plant, equipment and infrastructure maintenance management plan

- team leadership techniques

- operational techniques required for execution of the plan

- plant and equipment capabilities

- work planning techniques

- work monitoring methods.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- provide team leadership

- chose appropriate operational and construction techniques

- chose and assign appropriate plant and equipment

- develop and administer work plans.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- oral and/or written questioning on required knowledge and skills
- testimony from supervisors, colleagues, clients and/or other appropriate persons
- inspection of the final product or outcome
- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1. Perform the process/task
Level 2. Perform and administer the process/task
Level 3. Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 2 | 2 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to obtain information and advise colleagues of site plant, equipment and infrastructure maintenance management plan requirements.

- **Communicating ideas and information** — to resolve site plant, equipment and infrastructure maintenance management plan issues with work team.

- **Planning and organising activities** — to plan operational activities.

- **Working with teams and others** — to consult on application of the site plant, equipment and infrastructure maintenance management plan.

- **Using mathematical ideas and techniques** — to calculate resource requirements.

- **Solving problems** — to investigate potential improvements in plan application.

- **Using technology** — to use information systems to access and record plan information.

# MNQOPS503A Implement site plant and resource management plan

## Unit Descriptor

This unit covers the implementing of the site plant and resource management plan in a work site operation. It includes preparation for, planning, initiating, monitoring, adjusting and reporting on the implementation of site plant and resource management.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Prepare for development of the site plant and resource management plan. | 1.1 | Access, interpret and clarify the *legislative, organisation, and manufacturer's requirements and procedures* relevant to the implementation of the *site plant and resource management plan*. |
| | | 1.2 | Obtain, review and interpret the site *geological, hydrological and survey data* relevant to the implementation of the site plant and resource management plan. |
| | | 1.3 | Identify and document the site plant and resource that are to be covered by the management plan. |
| 2. | Prepare the site plant and resource management plan. | 2.1 | Involve *internal and external stakeholders* in the planning process in a way that uses their contribution effectively and gains their support for the outcomes. |
| | | 2.2 | Develop and document the site plant and resource management plan in accordance with the relevant legislative, organisation, and manufacturer's requirements and procedures. |
| | | 2.3 | Identify and acquire the *resource* required for the implementation of the site plant and resource management plan. |
| | | 2.4 | Identify and arrange any training required for personnel involved in the application of the site plant and resource management plan. |
| | | 2.5 | Prepare and present the site plant and resource management budget in accordance with the organisation's requirements. |
| 3. | Initiate, monitor and adjust the implementation of the site plant and resource management plan. | 3.1 | Issue and explain the site plant and resource management plan to team members and others involved, for the safe, effective and efficient implementation of the plan. |
| | | 3.2 | Provide timely ongoing support and advise to those applying the site plant and resource management plan. |
| | | 3.3 | Ensure records and reports are maintained and issued in accordance with the site plant and resource management plan requirements and other relevant legislative and organisational requirements. |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 3. (Continued) | 3.4 *Monitor* the site plant and resource management performance against the site, the budget and relevant legislative and organisational requirements. |
| | 3.5 Resolve anomalies in consultation with relevant stakeholders and issue appropriate instructions for adjustments to the plan and/or its implementation. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**The site plant and resources management plan** may cover:

- risk management requirements

- OHS requirements

- environmental requirements

- people

- raw feed reserves

- water

- soil

- mobile plant and equipment

- processing plant and equipment

- maintenance equipment and materials

- fuel, oil and lubricants

- explosives and blasting accessories

- land and buildings

- finances.

**Plant and resource management** may include:

- security requirements

- preserve the value of assets

- maintenance requirements

- minimising wastage

- preserving development consent.

**Legislative, organisation, and manufacturer's requirements and procedures** may include:

- risk management

- statutory compliance

- development approval, mining licences (or equivalent)

- OHS

- environmental

- quality

- purchasing

- contract management

- administration (including records and reports).

**Geological data** may include:

- soil quality, distribution and quantities

- resource quality, distribution and quantities

- faults, joints and other geological features.

**Hydrological data** may include:

- rainfall

- surface water, existing streams and dams

- catchment areas and runoff characteristics

- groundwater and bores.

**Survey data** may include:

- site and neighbouring land form

- site and neighbouring boundaries and structures

- site and neighbouring roads and other infrastructure

- approved limits of extraction

- title details.

**Internal and external stakeholders** may include:

- site and off-site employees

- contractors

- equipment suppliers

- geologists, surveyors and/or draughtspersons

- regulatory authorities representatives

- community representatives

- site neighbours.

**Resources** may include:

- financial

- labour

- materials

- services

- plant and equipment.

## EVIDENCE GUIDE

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to implement the site plant and resource management plan on a work site

- implementation of appropriate procedures and techniques for the efficient and effective implementation of the site plant and resource management plan on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
  a. preparation and issuing of a site plant and resource management plan that reflects the sites needs and the requirements of legislation and the organisation and is capable of achieving all of its planned outcomes
  b. identifying and making available the required resources for the safe, efficient and effective execution of the plan
  c. providing sound leadership and supervision of team in undertaking the implementation and application of the plan
  d. the successful implementation of the plan.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- site risk, statutory compliance, health, safety, environmental, quality and communication requirements and procedures

- organisation's plant and resource management policy, objectives and procedures (where they exist)

- site plant and resource management options and procedures

- administrative and operational techniques required for execution of the plan

- work planning techniques

- team leadership techniques

- consultative and coaching techniques

- work monitoring methods

- recording and reporting systems.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- interpret and apply legislative and organisational requirements

- provide team leadership

- choose appropriate administrative and operational techniques

- develop, initiate and administer work plans

- interpret and apply operational and maintenance data.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- oral and/or written questioning on required knowledge and skills
- testimony from supervisors, colleagues, clients and/or other appropriate persons
- inspection of the final product or outcome
- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.   Perform the process/task
Level 2.   Perform and administer the process/task
Level 3.   Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to develop and document the site plan and resource management plan.

- **Communicating ideas and information** — to involve them in the planning process.

- **Planning and organising activities** — to make available the necessary resources to ensure achievement of the plans objectives.

- **Working with teams and others** — to ensure the safe, effective and efficient implementation and application of the plan.

- **Using mathematical ideas and techniques** — to prepare the operational budget.

- **Solving problems** — to resolve anomalies in the plan outcomes.

- **Using technology** — to record and communicate information.

# MNQOPS511A Design surface blasts

## Unit Descriptor

This unit covers the designing surface blasts in a work site operation. It includes preparation for, planning, implementing, monitoring and adjusting and reporting on the outcomes of the blasting.

## *Units Replaced*

This unit replaces the blast design requirement of the unit MNQQM13A Manage blasting operations.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1. Identify and document the blast design parameters. | 1.1 Access, interpret and clarify the *legislative and organisation's requirements and procedures* relevant to the design and implementation of the blast. |
| | 1.2 Identify *potential hazards*, assess the associated risks and relevant parameters to be applied in the blast design. |
| | 1.3 Confirm the *geological and survey data* relevant to the design and implementation of the blast. |
| | 1.4 Access, interpret and clarify the *blast requirements* relevant to the design and implementation of the blast. |
| | 1.5 Identify *operational limitations* relevant to the design and implementation of the blast. |
| | 1.6 Identify the available *explosives* and their characteristics relevant to the design and implementation of the blast. |
| | 1.7 Identify the available *initiation options* and their characteristics relevant to the design and implementation of the blast. |
| 2. Prepare the blast plan. | 2.1 Apply the *blast design parameters* to prepare a safe, effective and efficient *blast plan.* |
| | 2.2 Ensure that the blast plan meets all of the blast requirements and parameters. |
| | 2.3 Prepare and present the blast plan budget in accordance with the organisation's requirements. |
| | 2.4 Document the blast plan in accordance with relevant legislative and organisation's requirements and procedures. |
| 3. Implement, monitor and adjust blast plans. | 3.1 Issue and explain the blast plan to team members and others involved, for the safe, effective and efficient implementation of the plan. |
| | 3.2 Provide timely ongoing support and advise to those implementing the blast plan. |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|

3.3 Ensure records and reports are maintained and issued in accordance with relevant legislative and organisational requirements.

3.4 Monitor the results of the blast against blast design requirements and parameters and the budget.

3.5 Resolve anomalies in consultation with relevant *stakeholders* and issue appropriate instructions for adjustments to future plans and/or their implementation.

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Legislative and organisation's requirements and procedures** may include:

- risk management

- statutory compliance

- development approval, mining licences (or equivalent)

- OHS

- environmental

- quality

- purchasing

- contract management

- administration (including records and reports).

**Potential hazards** may include:

- dust and fumes

- faulty explosives

- ground conditions

- high air and water pressures

- high voltage electricity

- radio frequencies and transmitters

- EMF hazards (e.g. static electricity, lightning)

- hot ground

- the transmission of compression-tension elastic vibrations in both solids and gases

- the generation and projection of elements, compounds and particulates from the site of explosion and related quantifiable damage

- physical damage to the environment

- damage to infrastructure

- damage to fauna and flora

- impact on human and domestic animal life and amenity

- perceived and psychological-emotional disturbance
- fluctuations and alterations of the hydrosphere.

**Geological data** may include:

- rock (or other material) types and characteristics
- faults and joints.

**Survey data** may include:

- site and neighbouring land form
- site and neighbouring boundaries and structures
- site and neighbouring roads and other infrastructure
- approved limits of extraction.

**Blast requirements** may include:

- production volumes
- heave
- throw
- fragmentation
- maximum instantaneous charge
- environmental constraints
- development consent conditions
- any site specific special requirements
- work site and/or pit plan.

**Operational limitations** may include:

- available drilling equipment
- historic data
- economic.

**Explosives** may include:

- high explosives (e.g. packaged and bulk high explosives
- low explosives (e.g. black powder)
- deflagrating explosives (e.g. propellants used for secondary blasting)
- detonators and detonator assemblies
- detonating cords and accessories
- fuses and igniter cords.

**Initiation options** may include:

- electrical
- non electrical
- delay detonators
- electronic delays.

**Blast design parameters** may include those required to account for:

- legislative requirements and procedures
- organisation's requirements and procedures
- potential hazards
- geological factors
- survey data
- blast requirements
- operational limitations
- available explosives
- available initiation options.

**Blast plan** may include:

- explosives to be used
- initiation system to be used
- initiation sequence to be used
- decking requirements
- stemming requirements
- blast hole pattern (including burden and spacing and orientation)
- blast hole diameters
- blast hole depth
- blast hole incline
- sub-grade requirement.

**Stakeholders** may include:

- site and off-site employees
- contractors
- equipment suppliers
- geologists, surveyors and/or draughtspersons
- regulatory authorities representatives
- community representatives
- site neighbours.


**EVIDENCE GUIDE**

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to design surface blasts for a work site

- implementation of appropriate procedures and techniques for the efficient and effective design of blasts for a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements.
  This will include:

  a. preparation and issuing of a blast design that reflects the requirements of the blasting parameters and is capable of achieving all of the sites planned outcomes
  b. providing sound leadership and supervision of team in undertaking the implementation and application of the plan
  c. the successful implementation of the plan.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- site risk, statutory compliance, health, safety, environmental, quality and communication requirements and procedures

- geological data

- survey data

- range of blasting parameters

- operational techniques required for execution of the plan

- plant and equipment capabilities

- work planning techniques

- team leadership techniques

- consultative and coaching techniques

- work monitoring methods

- recording and reporting systems.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- interpret and apply legislative and organisational requirements

- interpret and apply geological and survey data

- blast design procedures and calculations

- provide team leadership

- choose appropriate operational techniques

- choose and assign appropriate plant and equipment

- develop, initiate and administer work plans

- interpret and apply operational performance data.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

|  |  |
|---|---|
| Level 1. | Perform the process/task |
| Level 2. | Perform and administer the process/task |
| Level 3. | Perform, administer and evaluate/design the process/task |

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to identify and document the blast design parameters.

- **Communicating ideas and information** — issue and explain the blast plan to team members and others involved, for the safe, effective and efficient implementation of the plan.

- **Planning and organising activities** — to confirm the geological and survey data.

- **Working with teams and others** — to ensure the safe, effective and efficient implementation and application of the plan.

- **Using mathematical ideas and techniques** — to design the blast plan and prepare the blasting budget.

- **Solving problems** — to resolve anomalies in the programs outcomes.

- **Using technology** — to record and communicate information.

# MNQOPS512A Manage blast hole drilling operations

## Unit Descriptor

This unit covers the management of the blast hole drilling in a work site operation. It includes preparation for, planning, initiating, monitoring and adjusting and reporting on the implementation of blast hole drilling.

### *Units Replaced*

This unit replaces the units MNQQM12A Plan, conduct and oversee drilling operations.

| ELEMENT | PERFORMANCE CRITERIA | |
|---|---|---|
| 1. Prepare for blast hole drilling operations. | 1.1 | Access, interpret and clarify the *legislative and organisation's requirements and procedures* relevant to the planning and implementation of blast hole drilling operations. |
| | 1.2 | Confirm the *geological and survey data* relevant to the planning and implementation of blast hole drilling operations. |
| | 1.3 | Access, interpret and clarify the *blast design parameters* relevant to the planning and implementation of the blast hole drilling operations. |
| 2. Plan the blast hole drilling program. | 2.1 | Involve *internal and external stakeholders* in the planning process in a way that uses their contribution effectively and gains their support for the outcomes. |
| | 2.2 | *Select and identify source of the equipment* to be used for the safe, effective and efficient implementation of the blast hole drilling program. |
| | 2.3 | Develop and document the blast hole drilling program in accordance with the blast design parameters, the confirmed geological and survey data and relevant legislative and organisation requirements and procedures. |
| | 2.4 | Identify and acquire the *resource* required for the implementation of the *blast hole drilling*. |
| | 2.5 | Identify and arrange any training required for personnel involved in the pit operations. |
| | 2.6 | Prepare and present the blast hole drilling program budget in accordance with the organisation's requirements. |
| 3. Implement, monitor and adjust the blast hole drilling program. | 3.1 | Issue and explain the blast hole drilling program to team members and others involved, for the safe, effective and efficient implementation of the program. |
| | 3.2 | Provide timely ongoing support and advise to those implementing the blast hole drilling program. |
| | 3.3 | Ensure that the blast pattern is correctly marked out in accordance with the blast design. |

3.4   Ensure records and reports are maintained and issued in accordance with the pit development requirements and other relevant legislative and organisational requirements.

3.5   Monitor the blast hole drilling program and its performance against blast design parameters, the budget and relevant legislative and organisational requirements.

3.6   Resolve anomalies in consultation with relevant stakeholders and issue appropriate instructions for adjustments to the plan and/or its implementation.

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Legislative and organisation's requirements and procedures** may include:

- risk management

- statutory compliance

- development approval, mining licences (or equivalent)

- OHS

- environmental

- quality

- purchasing

- contract management

- administration (including records and reports).

**Geological data** may include:

- rock (or other resource) types and characteristics

- faults and joints.

**Survey data** may include:

- site and neighbouring land form

- site and neighbouring boundaries and structures

- site and neighbouring roads and other infrastructure

- approved limits of extraction

- title details.

**Blast design parameters** would be included in the blast design and may include:

- blast hole pattern (including burden and spacing and orientation)

- blast hole diameters

- blast hole depth

- blast hole incline

- sub-grade requirement.

**Internal and external stakeholders** may include:

- site and off-site employees
- contractors
- equipment suppliers
- geologists, surveyors and/or draughtspersons
- regulatory authorities representatives
- community representatives
- site neighbours.

**Selection and identification of the source of equipment** may include:

- site geological factors
- blasting parameters
- availability of organisation's equipment
- availability of contractors equipment
- comparative costs of various options.

**Resources** may include:

- financial
- labour
- materials
- services
- plant and
- equipment.

## EVIDENCE GUIDE

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to implement the blast hole drilling on a work site
- implementation of appropriate procedures and techniques for the efficient and effective implementation of the blast hole drilling on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
    a. preparation and issuing of a blast hole drilling program that reflects the requirements of the blasting parameters and is capable of achieving all of the sites planned outcomes
    b. identifying and making available the required resources for the safe, efficient and effective execution of the program
    c. providing sound leadership and supervision of team in undertaking the implementation and application of the program
    d. the successful implementation of the program.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- site risk, statutory compliance, health, safety, environmental, quality and communication requirements and procedures

- geological data

- survey data

- blasting parameters

- pit development options and procedures

- operational techniques required for execution of the plan

- plant and equipment capabilities

- work planning techniques

- team leadership techniques

- consultative and coaching techniques

- work monitoring methods

- recording and reporting systems.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- interpret and apply legislative and organisational requirements

- interpret and apply geological and survey data

- provide team leadership

- choose appropriate operational techniques

- choose and assign appropriate plant and equipment

- develop, initiate and administer work plans

- interpret and apply operational performance data.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.    Perform the process/task
Level 2.    Perform and administer the process/task
Level 3.    Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to develop and document the blast hole drilling program.

- **Communicating ideas and information** — to involve them in the planning process.

- **Planning and organising activities** — to confirm the geological and survey data.

- **Working with teams and others** — to ensure the safe, effective and efficient implementation and application of the program.

- **Using mathematical ideas and techniques** — to prepare the operational budget.

- **Solving problems** — to resolve anomalies in the programs outcomes.

- **Using technology** — to record and communicate information.

# MNQOPS513A Manage blasting operations

## Unit Descriptor

This unit applies to shot firing operations, and for persons seeking skills in shot firing for surface or underground mining operations, construction and demolitions.

### Units Replaced

This unit replaces the unit MNQQM13A Manage blasting operations, other than the blast design requirements that are included in MNQOPS511A Design surface mine blasts.

### Links outside this unit

- The work covered in this unit is relevant to AS/NZS2187.2 — Use of explosives.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1. Identify and apply explosives practices. | 1.1 Identify *potential hazards*, assess risks and ensure work area is safe. |
| | 1.2 Access, interpret and validate the blast design criteria. |
| | 1.3 Identify and apply basic calculations to verify *blasting calculations*. |
| | 1.4 Identify the *explosives* and *accessories* used for blasting applications. |
| | 1.5 Identify explosives by *classification* according to statutory criteria. |
| | 1.6 Ensure safe handling procedures and safety precautions are applied according to *legislative and site requirements and procedures*. |
| | 1.7 Ensure safe transport procedures and safety precautions are applied according to legislative and site requirements and procedures. |
| | 1.8 Ensure safe storage procedures and safety precautions are applied according to statutory requirements, relevant legislative and site requirements and procedures. |
| 2. Comply with explosives legislation. | 2.1 Obtain relevant permits, licenses or authorities needed for blasting operations. |
| | 2.2 Order or purchase explosives in compliance with legislative and site requirements and procedures. |
| | 2.3 Ensure that the setting up, maintaining and security of explosives storage locations comply with appropriate legislative and site requirements and procedures. |
| | 2.4 Ensure all *recording* and reporting requirements are in accordance with legislative and site requirements and procedures. |
| | 2.5 Conduct the risk management process and apply the management system in accordance with legislative and site requirements and procedures. |

| | **ELEMENT** | | **PERFORMANCE CRITERIA** |
|---|---|---|---|
| 3. | Manage the effects of blasting on the environment. | 3.1 | Identify *environmental hazards* and analyse the risks associated with blasting. |
| | | 3.2 | Ensure that procedures for the installation, establishment and *operation* of *monitoring systems* are included in the management plan. |
| | | 3.3 | Identify, evaluate and use the relevant controls, to minimise the impact of blast design and blast charging on the environment. |
| | | 3.4 | Identify, analyse and confirm the objectives and criteria for safe and effective blast monitoring. |
| | | 3.5 | Ensure through evaluation, the selection of monitoring locations, systems and instruments. |
| | | 3.6 | Ensure that procedures for audit, review and updating of blast monitoring are included in the management plan. |
| | | 3.7 | Ensure that procedures for implementation of controls are included in the management plan. |
| | | 3.8 | Ensure that environmental monitoring records and reports are kept and maintained according to legislative and site requirements and procedures. |
| 4. | Maintain blasting equipment. | 4.1 | Identify the equipment necessary for use in preparing, initiating or monitoring blasting operations. |
| | | 4.2 | Ensure that all blast and blast monitoring equipment is *maintained* in accordance with manufacturers' requirements and legislative and site requirements and procedures. |
| | | 4.3 | Ensure that where relevant blast monitoring instrumentation has valid calibration information as specified in manufacturers' requirements and according to site procedures. |
| | | 4.4 | Ensure that routine inspection and minor *maintenance* is conducted on blasting equipment. |
| | | 4.5 | Ensure that maintenance and inspection records are kept according to manufacturers', legislative and site requirements and procedures. |
| 5. | Manage special conditions. | 5.1 | Identify potential hazards resulting from physical, biological or chemical situations which include heat, cold, climatic and electro-static conditions. |
| | | 5.2 | Control and monitor special conditions that may occur. |
| | | 5.3 | Ensure that records and reports on special conditions are kept and maintained according to legislative and site requirements and procedures. |
| | **ELEMENT** | | **PERFORMANCE CRITERIA** |
| 6. | Manage misfires. | 6.1 | Re-assess for potential hazards and risks and ensure work area is safe. |
| | | 6.2 | Ensure that the blast area is inspected to identify |

|   | | misfires or potential misfires and identify *cause of misfire.* |
|---|---|---|
|   | 6.3 | Ensure that misfire area is secured and information communicated to other persons who may be affected. |
|   | 6.4 | Ensures misfires are *remedied* according to relevant legislation, standards and site procedures. |
|   | 6.5 | Ensures that the area is deemed safe in accordance with legislative and site requirements and procedures. |
|   | 6.6 | Ensure misfire is recorded and report misfires according to relevant legislative and site requirements and procedures. |
| 7. Manage the disposal of explosives. | 7.1 | Ensure that damaged or *deteriorated* explosives and accessories are identified. |
|   | 7.2 | Ensure that an applicable *disposal* method for explosives and accessories is selected. |
|   | 7.3 | Plan for the disposal of the damaged, *deteriorated* or surplus explosives. |
|   | 7.4 | Ensure the disposal of damaged, deteriorated and surplus explosives of detonators is carried out in accordance with legislative and site requirements and procedures and manufacturers' recommendations/ procedures. |
|   | 7.5 | Ensure that site emergency services are aware of the disposal activities in accordance with legislative and site requirements and procedures. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Potential hazards** may include:

- broken detonation leads
- dust and fumes
- faulty equipment
- faulty explosives
- ground conditions
- high air and water pressures
- high voltage electricity
- hydraulic oil pressure
- lost holes
- misfires
- trespassers
- radio frequencies and transmitters

- EMF hazards (e.g. static electricity, lightning)
- hot ground.

**Blasting calculations** may involve:

- simple or complex arithmetic, algebraic, geometric and trigonometric operations
- transposition of formulae
- powder factor
- areas, volumes and densities (mass) calculations
- estimation of quantities
- calculations involving electrical units (amps, volts, ohms)
- use of electronic devices such as calculators and computers.

**Explosives** may include:

- high explosives (e.g. packaged and bulk high explosives)
- low explosives (e.g. black powder)
- deflagrating explosives (e.g. propellants used for secondary blasting)
- detonators and detonator assemblies
- detonating cords and accessories
- fuses and igniter cords.

**Accessories** may include:

- exploders
- circuit testers
- connecting wire and cables
- ANFO mixers and loaders
- crimpers
- cutters
- stemming rods
- loading poles.

**The classification of explosives** is defined in the Australian Code for Transport of Explosives by Road and Rail 2$^{nd}$ edition.

**Legislative and site requirements and procedures** may include:

- explosives legislation for relevant State or Territory
- mining, safety and health legislation for relevant State or Territory
- dangerous goods legislation for relevant State or Territory
- major hazard facility legislation for relevant State or Territory
- OHS legislation for relevant State or Territory
- maritime legislation (State or Federal)
- Local Government legislation
- development consent conditions

- common law
- criminal law
- Australian Standards.

**Records of blasting and related activities** may include:

- records of purchase
- records of carriage
- records of consumption and disposal of explosives
- cart notes
- magazine records
- blast designs
- blast plans
- shot firers' reports
- blast monitoring records
- complaints, injury and accident reports
- records of face profiling and bore tracking surveys, video tapes or photographs
- records may be kept as papers, bound forms, field books, computer printouts, floppy disks, video tapes, digital records, specific or routine reports or logbooks.

**Environmental hazards** may include:

- the transmission of compression-tension elastic vibrations in both solids and gases
- the generation and projection of elements, compounds and particulates from the site of explosion and related quantifiable damage
- physical damage to the environment
- damage to infrastructure
- damage to fauna and flora
- impact on human and domestic animal life and amenity
- perceived and psychological-emotional disturbance
- fluctuations and alterations of the hydrosphere.

**Operation of equipment** may include:

- the selection of optimum sites
- preparation for installation
- installation
- operation
- as well as troubleshooting in any of these steps.

**Monitoring system** may include:

- strain 3 cameras
- still cameras.

**Collection and analysis of environmental data** may include:

- the physical accumulation of digital or analogue signals in any form of storage retrievable on demand
- the review of data.

**Design criteria for portable monitoring** may include:

- statutory calibration
- size
- weight
- ease of operation
- battery recharge characteristics.

**Defects to monitoring devices** may include:

- inferior design
- deterioration of materials
- inadequate quality of manufacture
- physical and water damage.

**Maintenance of the monitoring system** may include:

- inspection
- testing
- service and repair.

**Maintenance and servicing of equipment** may include:

- the testing of exploders and electronic instrumentation
- minor servicing of equipment.

**Causes of misfires** may include:

- faulty explosives or accessories
- damaged or deteriorated explosives or accessories
- improperly assembled explosives components
- inappropriate or incomplete combinations of components
- operator error or inexperience
- inattention to detail or ignorance
- environmental influences (e.g. wet weather or poor visibility).

**Remedies for misfires** can include:

- the refiring of shots when circumstances permit
- the removal of stemming and placement of a proximity charge close to the original misfired charge
- the withdrawal of the misfired charge
- flushing out of bulk explosives columns using water or air or both
- drilling, loading and firing of relieving holes.

**Methods and systems to prevent misfires happening** can include:

- following manufacturers recommendations for use
- following product or site specific standard operating procedures
- following a site specific safety management system.

**References specific to misfires** will include:

- legislation
- AS/NZS2187.2 — Use of explosives
- manufacturers' product data sheets
- manufacturers' instructions for safe use of explosives
- explosives information bulletins and instructional books

**Disposal of explosives** may involve:

- state legislation
- Australian Standard AS/NZS 2187.2 — Use of explosives
- explosives information bulletins
- management plans.

**Symptoms of deterioration of explosives** can include:

- exudation
- efflorescence
- sweating
- liquefaction
- hardening
- softening
- discolouration
- crystallisation
- staining
- damage to wrappers and carcasses
- damage to containers
- physical wear and tear
- kinking
- abrasions and cuts
- crushing
- loss of identification labels and markings
- exposure to the elements.

**Methods of disposal** may include:

- burning by the shot firers on site
- detonation in a production drill hole
- detonation in a controlled manner

- return to supplier or delivery or surrender to an explosives inspector for destruction in an approved incinerator.

**Personnel** may include:

- blasters

- contractors

- drillers

- drivers

- holders of appropriate tickets

- inspectors

- licensed operators

- maintenance staff

- personnel authorised by work site management

- service personnel

- supervisors

- surveyors

- trades persons.

## EVIDENCE GUIDE

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to manage blasting operations on a work site

- implementation of appropriate procedures and techniques for the efficient and effective management of blasting operations on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
  a. conducting activities safely and effectively
  b. achieving quality and productivity targets
  c. adhering to and understanding relevant legislative requirements
  d. adhering to and understanding environmental and heritage issues.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- Australian codes and standards (e.g. AS/NZS 2187 series)

- shot firing site procedures

- explosives and safety and health legislation

- emergency procedures

- environmental procedures

- equipment processes, technical capability and limitations

- equipment safety requirements

- basic geological and technical information

- blast plans

- hazardous goods procedures (handling and transport)

- isolation and lock out procedures

- manufacturers' instructions

- management systems

- preparation for and use of explosives

- safe operating procedures

- risk management including application of appropriate controls to identify risks

- site procedures

- transportation of explosives

- job safety analysis

- start up and shut down procedures

- explosives storage procedures

- types and characteristics of blasting agents, explosives and initiation systems

- concepts such as density, velocity and relationships between variable

- assimilation, interpretation and application of information and technical data

- mathematical processes and applications

- cause and management of misfires

- identification of safety and environmental hazards

- explosives disposal methods

- record keeping requirements and formats.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- selection and use of personal protective equipment

- plan and document reading

- communications by electronic, radio and other means

- blasting preparation techniques

- hazard identification

- hazardous substances handling techniques

- mathematical calculations

- diagnostic techniques.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- observation of processes and procedures
- oral and/or written questioning on required knowledge and skills
- testimony from supervisors, colleagues, clients and/or other appropriate persons
- inspection of the final product or outcome
- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.    Perform the process/task
Level 2.    Perform and administer the process/task
Level 3.    Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 2 | 3 | 2 | 2 | 2 | 3 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to identify hazards and assess risk.

- **Communicating ideas and information** — to ensure safe procedures are adopted.

- **Planning and organising activities** — to manage misfires.

- **Working with teams and others** — to ensure safe work practices are adopted.

- **Using mathematical ideas and techniques** — to validate blast calculations.

- **Solving problems** — to select appropriate methods for disposal of damaged or deteriorated explosives.

- **Using technology** — to recording, analysing and distributing data.

# MNQOPS550A Implement and maintain the site plant, equipment and infrastructure maintenance plan

## Unit Descriptor

This unit covers the implementation and maintenance of the site *plant, equipment and infrastructure maintenance* system in work site operations. The unit includes the requirements for the: planning and preparation of a site plant, equipment and infrastructure maintenance program; implementation of that program; and the monitoring, adjusting and reporting requirements for the program.

| ELEMENT | | PERFORMANCE CRITERIA |
|---|---|---|
| 1. Plan and prepare a maintenance program. | 1.1 | Access, interpret and clarify *legislative and the organisation's requirements* relevant to the implementation of the plan. |
| | 1.2 | Identify and determine maintenance needs of site plant, equipment and infrastructure in compliance with organisation's plant, equipment and infrastructure maintenance requirements. |
| | 1.3 | Obtain manufacturers and suppliers' advice on maintenance needs of plant, equipment and infrastructure. |
| | 1.4 | Prepare a maintenance program, in consultation with other stakeholders, that meets the organisation's requirements. |
| | 1.5 | Apply risk, statutory compliance, health, safety and environmental management principles when developing the maintenance program, in accordance with legislative and the organisation's requirements. |
| | 1.6 | Identify and gain approval for resources required to support the maintenance program. |
| | 1.7 | Obtain any approvals required for the implementation of the maintenance program. |
| 2. Implement maintenance program. | 2.1 | Advise site supervisors and staff of the need for and objectives of the maintenance program and seek their input into its implementation. |
| | 2.2 | Arrange any training requirements to support the implementation of the program. |
| | 2.3 | Provide clear instructions to supervisors and other appropriate team members in sufficient detail for them to fulfil their role in the implementation of the program. |
| | 2.4 | Arrange for the timely availability of financial and other resources necessary for the implementation of the program. |

| ELEMENT | PERFORMANCE CRITERIA |
|---------|---------------------|
| 3. Monitor, adjust and report on program. | 3.1 Ensure records of maintenance program activities and costs are maintained in sufficient detail to allow for analysis. |
| | 3.2 Monitor the *maintenance plan/program* performance against its planned outcomes, the budget and relevant legislative and organisational requirements. |
| | 3.3 Implement improvements to program having gained approval where necessary. |
| | 3.4 Have reports on plant, equipment and infrastructure maintenance completed and submitted in accordance with organisational requirements. |

## RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Plant, equipment and infrastructure maintenance** may include:

- preserve the value of assets
- maintenance or serviceability.

**The site plant, equipment and infrastructure maintenance plan/program** may include:

- scheduling requirements
- limitation on tasks to be performed by site personnel
- nominated suppliers
- oil sampling requirements
- housekeeping requirements
- cleaning requirements
- waste disposal requirements
- maintenance of records
- inspection requirements
- stock take techniques and requirements
- risk, statutory compliance, health, safety, environmental, quality and communication requirements.

**Legislative and organisation requirements and procedures** may include:

- risk management
- statutory compliance
- development approval, mining licences (or equivalent)
- OHS
- environmental
- quality

- purchasing

- contract management

- administration (including records and reports)

- general duty of care.

## EVIDENCE GUIDE

# Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to implement the plant equipment and infrastructure maintenance plan on a work site

- implementation of appropriate procedures and techniques for the efficient and effective implementation of the plant, equipment and infrastructure maintenance plan on a work site, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:

  a. a workable plan that is capable of achieving the organisation's objectives
  b. implementation strategies and activities that achieve the successful implementation of the management program
  c. outcomes of the monitoring and reporting program that identify potential improvements and actions to implement those improvements.

# Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- statutory and organisational requirements

- maintenance needs of site plant, equipment and infrastructure

- organisation's plant, equipment and infrastructure maintenance requirements

- risk, statutory compliance, health, safety and environmental management principles

- financial and other resources

- analysis techniques

- approval processes

- reporting requirements.

# Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- apply statutory and organisational requirements

- identify maintenance needs of site plant, equipment and infrastructure

- apply the organisation's plant, equipment and infrastructure maintenance requirements

- apply risk, statutory compliance, health, safety and environmental management principles
- prepare financial and other resource estimates and budgets
- provide leadership in the workplace.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- oral and/or written questioning on required knowledge and skills
- testimony from supervisors, colleagues, clients and/or other appropriate persons
- inspection of the final product or outcome
- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly

referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.    Perform the process/task
Level 2.    Perform and administer the process/task
Level 3.    Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|---|---|---|---|---|---|---|
| 3 | 3 | 3 | 3 | 3 | 3 | 3 |

Examples of application include:

- **Collecting, analysing and organising information** — to obtain information and prepare an implementation plan.

- **Communicating ideas and information** — to advise site supervisors and other team members of their roles and responsibilities in the maintenance of site plant, equipment and infrastructure.

- **Planning and organising activities** — to plan training requirements.

- **Working with teams and others** — to gain their input to the plan.

- **Using mathematical ideas and techniques** — to calculate resource requirements.

- **Solving problems** — to investigate potential improvements in the program.

- **Using technology** — to use information systems to access maintenance information.

# MNQOPS650A Establish plant, equipment and infrastructure maintenance system

## Unit Descriptor

This unit covers the use of appropriate measures and criteria to establish *plant, equipment and infrastructure maintenance systems* in an organisation. It included establishing installation and commissioning procedures for plant, equipment and infrastructure; developing systems for the maintenance of plant and equipment and work site infrastructure; and establish systems for audit and review of the plant, equipment and infrastructure maintenance.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1. | Establish installation and commissioning procedures for plant, equipment and infrastructure. | 1.1 | Establish procedures to identify *hazards* and analyse and evaluate *risks* associated with plant, equipment and infrastructure installation and commissioning. |
| | | 1.2 | Ensure the integration of new and existing plant and equipment and processes is planned and prepared to achieve optimum performance. |
| | | 1.3 | Ensure safe operating procedures and rules are developed from a detailed analysis of work site and *legislative and organisation's requirements*. |
| | | 1.4 | Ensure plant and equipment installation and commissioning procedures are developed and implemented in accordance with legislative and organisation's requirements. |
| | | 1.5 | Ensure infrastructure construction/fabrication and commissioning procedures are developed and implemented in accordance with legislative and organisation's requirements. |
| | | 1.6 | Ensure programs, systems and procedures, to satisfy identified plant, equipment and infrastructure training requirements, are developed and implemented. |
| | | 1.7 | Ensure emergency response and evacuation plans and procedures are implemented in accordance with legislative and organisation's requirements. |
| 2. | Develop systems for the maintenance of plant and equipment. | 2.1 | Develop and have approved the organisation's maintenance policy and strategies. |
| | | 2.2 | Ensure operational procedures for plant and equipment usage are developed and implemented from legislative and organisation's requirements and manufacturers' information and incorporated into site documentation. |
| | | 2.3 | Ensure maintenance systems and procedures for plant and equipment are developed and implemented in accordance with organisation's policies strategies and other relevant legislative and organisation's requirements and manufacturers' instructions. |

| ELEMENT | | PERFORMANCE CRITERIA |
|---|---|---|
| | 2.4 | Ensure maintenance systems documentation is developed and implemented in accordance with legislative and organisation's requirements. |
| | 2.5 | Ensure procedures for reviewing and modifying maintenance work processes are developed and implemented. |
| 3. Establish systems for the maintenance of work site infrastructure. | 3.1 | Develop and have approved the organisation's infrastructure maintenance policy and strategy. |
| | 3.2 | Ensure operational procedures for work site infrastructure usage are developed from legislative and organisation's requirements and manufacturers' information and incorporated into site documentation. |
| | 3.3 | Ensure maintenance systems and procedures for work site infrastructure are developed and implemented in accordance with legislative and organisation's requirements, enterprise maintenance policy and strategies and providers' instructions. |
| | 3.4 | Ensure maintenance systems documentation is developed and implemented in accordance with legislative and organisation's requirements. |
| | 3.5 | Ensure procedures for reviewing and modifying work processes are developed and implemented. |
| 4. Establish systems for audit and review of plant, equipment and infrastructure maintenance. | 4.1 | Ensure procedures to evaluate and confirm plant, equipment and infrastructure maintenance compliance with legislative and organisation's requirements are developed and implemented. |
| | 4.2 | Ensure future plant, equipment and infrastructure systems and equipment requirements are identified, assessed and incorporated into planning processes. |
| | 4.3 | Ensure procedures to confirm the currency and compliance of plant, equipment and infrastructure maintenance and safety standards are implemented. |
| | 4.4 | Ensure systems for recording and reporting of plant, equipment and infrastructure information are developed and implemented in accordance with legislative and organisation's requirements. |
| | 4.5 | Ensure procedures for incorporating feedback into the audit/review system are developed and implemented. |
| | 4.6 | Ensure procedures to confirm the currency, relevance and compliance of the training program against identified requirements are developed and implemented. |
| | 4.7 | Ensure procedures for response to instances of non-compliance or other discrepancies or deficiencies revealed by audit are developed and implemented. |

### RANGE STATEMENT

The following range of variables is subject to site-specific operations, but is not limited to the following details. Site procedures, regulations and OHS and other relevant legislation apply to all elements and performance.

**Plant, equipment and infrastructure maintenance** may include:

- preserve the value of assets
- maintenance or serviceability.

**The site plant, equipment and infrastructure maintenance plan** may include:

- scheduling requirements
- limitation on tasks to be performed by site personnel
- nominated suppliers
- oil sampling requirements
- housekeeping requirements
- cleaning requirements
- waste disposal requirements
- maintenance of records
- inspection requirements
- stock take techniques and requirements
- risk, statutory compliance, health, safety, environmental, quality and communication requirements.

**Hazard** is a source or a situation with a potential for harm in terms of human injury or ill-health, damage to property, damage to the environment, or a combination of these.

**Risk** is the combination of the frequency, or probability of occurrence, and consequence of a specified hazardous event.

**Legislative and organisation requirements and procedures** may include:

- risk management
- statutory compliance
- development approval, mining licences (or equivalent)
- OHS
- environmental
- quality
- purchasing
- contract management
- administration (including records and reports).

**EVIDENCE GUIDE**

## Critical Aspects of Evidence

The evidence required to demonstrate this competency must be relevant to work site operations. In addition to satisfying the requirements of all elements, performance criteria, required knowledge and skills, evidence must include demonstration of:

- knowledge of procedures, requirements and instructions to establish the plant, equipment and infrastructure maintenance system in a mining organisation

- implementation of appropriate procedures and techniques for the efficient and effective establishment of the plant, equipment and infrastructure maintenance system in a mining organisation, while complying with site risk control, health, safety, environmental, quality and communication requirements. This will include:
  a. identification and documentation of relevant policies and strategies for the establishing of the plant, equipment and infrastructure maintenance systems
  b. preparation and issuing of a instructions on the implementation of plant, equipment and infrastructure maintenance that reflects the policies and strategies of the system are capable of achieving all of its planned outcomes
  c. identifying the required resources for the safe, efficient and effective execution of the plan
  d. providing sound leadership and supervision of team in undertaking the implementation of the plan. reviewing and auditing the effectiveness of the maintenance system.

## Required Knowledge

Specific knowledge is required to achieve the performance criteria in this unit to the standards of performance required in the workplace, to transfer the skills to other contexts and to deal with unplanned events. Assessment requires evidence of the ability to identify and explain the purpose of:

- legislative, statutory, Australian Standards and site specific requirements for plant and infrastructure

- work site design principles and procedures relating to fixed plant and infrastructure systems

- safety design features for maintenance of fixed plant and infrastructure

- work site operation systems and procedures including:
  - stores systems
  - roadway maintenance
  - protection systems
  - reticulation systems
  - specifications for fixed plant and infrastructure
  - audit processes
  - computer based systems
  - training programs
  - fire fighting systems and precaution rules
  - maintenance surveys.

## Required Skills

Specific skills are required to achieve the performance criteria in this unit. In addition to the generic skills identified in the Key Competencies section of this unit, assessment needs to obtain evidence of the ability to:

- access, interpret and apply:
  - technical information
  - site/legislative requirements
  - records and reports
  - briefings and handover details
- assess the risks and consequences attached to plant, equipment and infrastructure systems
- plan and coordinate work
- identify training needs related to plant, equipment and infrastructure systems
- interpret manufacturers' instructions
- conduct maintenance survey.

## Assessment and Interdependence of Units

This unit may be assessed with other relevant units forming a cohesive work function, according to specific work site requirements.

## Prerequisite Units

There are no prerequisite units for this unit.

## Resource Implications

Assessment of this competency requires typical resources normally used in a work-site work environment. Selection and use of resources for particular work sites may differ due to work site conditions, equipment availability, equipment/plant types and different contexts.

## Consistency in Performance

To ensure consistency of performance, this unit may be assessed over a period of time and a range of work and site conditions. Local site factors will influence the breadth of evidence require to demonstrate the competency.

## Context for Assessment

This unit should be assessed in the work environment where possible. Some assessment events may be conducted under simulated conditions where issues of safety and/or environmental damage are limiting factors.

All assessments must be valid, reliable, fair, flexible and sufficient evidence should be accumulated to demonstrate the required competence.

The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those required on the job.

## Methods of Assessment

Appropriate methods of assessment for this unit will usually include:

- oral and/or written questioning on required knowledge and skills

- testimony from supervisors, colleagues, clients and/or other appropriate persons

- inspection of the final product or outcome

- a portfolio of documentary evidence.

Where performance is not directly observed and/or is required to be demonstrated over a period of time and/or in a number of locations, any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons.

Questioning should be undertaken in such a manner as is appropriate to the language and literacy levels of the candidate and to the requirements of the unit of competency.

Assessment should also reinforce the integration of the Key Competencies.

## Key Competencies

There are a number of basic skills that are learnt through work and life which are required in all jobs and which enable people to transfer and apply knowledge and skills developed in classrooms and other learning situations to the workplace. These skills are commonly referred to as the Key Competencies. There are three levels at which these Key Competencies can be applied:

Level 1.  Perform the process/task
Level 2.  Perform and administer the process/task
Level 3.  Perform, administer and evaluate/design the process/task

The level of application of each Key Competency in the context of **this** unit is detailed below:

| Collect, analyse and organise information | Communicate ideas and information | Plan and organise activities | Work with others and in teams | Use mathematical ideas and techniques | Solve problems | Use technology |
|:---:|:---:|:---:|:---:|:---:|:---:|:---:|
| 3 | 2 | 3 | 2 | 2 | 2 | 2 |

Examples of application include:

- **Collecting, analysing and organising information** — to audit the implementation of the system.

- **Communicating ideas and information** — to instruct and inform those implementing the system of the requirements of the system.

- **Planning and organising activities** — to conduct audits of the system.

- **Working with teams and others** — to establish the system.

- **Using mathematical ideas and techniques** — to analyse trends and benefits of the system.

- **Solving problems** — to overcome non-compliant situations.

- **Using technology** — to record and analyse data provided in the systems reports.

# PMLDATA400A Process and interpret data

## Unit Descriptor

This unit of competency covers the ability to retrieve data, evaluate formulae and perform scientific calculations, present and interpret information in tables and graphs and keep accurate records. The unit requires personnel to solve problems of limited complexity where the information may be less obvious, but not contradictory, and can be determined by direct reasoning.

This unit of competency is based on, and equivalent to, the unit *PMLDATA300A Process and record data* in PML99.

This unit of competency has no prerequisites.

This unit of competency is applicable to laboratory assistants, field/laboratory technicians and instrument operators in all industry sectors covered by this Training Package.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1. Retrieve and check data | 1.1 Store and retrieve data using appropriate files and/or application software |
| | 1.2 Verify the quality of data using enterprise procedures |
| | 1.3 Rectify errors in data using enterprise procedures |
| 2. Calculate scientific quantities | 2.1 Calculate statistical values for given data |
| | 2.2 Calculate scientific quantities and associated uncertainties using given formulae and data |
| | 2.3 Ensure calculated quantities are consistent with estimations and expectations |
| | 2.4 Report all calculated quantities using the appropriate units and correct number of significant figures |
| 3. Present data in tables, charts and graphs | 3.1 Present data in clearly labelled tables and charts |
| | 3.2 Graph data using appropriate scales to span the range of data or display trends |
| | 3.3 Report all data using the appropriate units and number of significant figures |
| 4. Interpret data in tables, charts and graphs | 4.1 Interpret significant features of graphs, such as gradients, intercepts, maximum and minimum values, and limit lines |
| | 4.2 Recognise and report trends in data |

| 5. | Keep accurate records and maintain their confidentiality | 5.1 | Transcribe information accurately |
| | | 5.2 | Verify the accuracy of records following enterprise procedures |
| | | 5.3 | File and store workplace records in accordance with enterprise procedures |
| | | 5.4 | File all reference documents logically and keep them up-to-date and secured |
| | | 5.5 | Observe enterprise confidentiality standards. |

## RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

Data may be recorded on worksheets or entered into spreadsheets or databases linked to information management systems. Data includes the results of: observations, tests and measurements, analyses, surveys, quality assurance and control assessments.

Data may be presented in the form of graphs, tables, histograms, pie charts, bar charts and control charts.

Data could also take the form of semi-quantitative observations and be expressed on a scale, for example, 1 to 4 or + to ++++.

Calculations may be performed with or without a calculator or using computer software, spreadsheets, databases and statistical packages. Examples of calculated scientific quantities could include:

- percentage and absolute uncertainties in measurements and test results

- areas ($m^2$) and volumes (mL, L, $m^3$) of regular shapes, such as packaging

- dose (mg), average mass, mass percentage, density, specific gravity, moisture, relative and absolute humidity, viscosity, permeability

- ratios, such as mass to mass, mass to volume and volume to volume percentages

- concentration, such as molarity, g/100mL, mg/L, mg/μL, ppm, ppb, dilution mL/L

- average count, colonies per swab surface, cell counts, such as live and dead/total

- process variables, such as pressure, gauge pressure, velocity, flow rates

- biological oxygen demand (BOD), chemical oxygen demand (COD), total organic carbons (TOC)

- % content of moisture, ash, fat, protein, alcohol, sulphur dioxide, trace metals, such as calcium or zinc

- food properties, such as % concentration (dry), friability, bitterness, brix, free amino nitrogen, diastatic power, calorific content and yeast viability

- stress, strain, moduli, force.

Records could include information associated with:

- purchase of equipment and materials, service records

- safety procedures

- history of calibration and test results.

Reference materials could include:

- material safety data sheets (MSDSs)

- equipment manuals and warranty, supplier catalogues, handbooks

- sampling and test procedures, standard operating procedures (SOPs)

- enterprise quality manual, customer quality plan

- validation of the equipment and associated software where applicable

- validation of spreadsheets developed in house for assay and process calculations

- OHS regulations, guidelines and procedures

- Australian and International Standards, NATA technical notes, National Measurement Act.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potential hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

- can code, record and check the documentation of data

- calculates statistical quantities relevant to his/her work and presents accurate results in the required format

- calculates scientific quantities relevant to his/her work and presents accurate results in the required format

- recognises anomalies and trends in data

- maintains the confidentiality of data in accordance with workplace and regulatory requirements

- keeps records up-to-date and secure.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- procedures for coding, entering, storing, retrieving and communicating data

- procedures for verifying data and rectifying mistakes

- procedures for maintaining and filing records, security of data

- relevant scientific and technical terminology, such as precision, accuracy, 'out of control' traceability.

Competency also includes the ability to:

- perform calculations involving fractions, decimals, ratios, proportions and percent

- perform calculations of mean, median, mode, range and standard deviation

- perform calculations of perimeters, areas, volumes, angles

- perform calculations of scientific quantities (for example, concentration)

- use scientific notation, convert units involving multiples and submultiples

- use significant figures, round off, estimate, approximate

- calculate and interpret absolute and percentage uncertainties

- transpose and evaluate formulae

- prepare graphs, tables and charts (pie, bar, histogram) and interpret trends

- prepare and interpret process control charts.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- review of data work sheets, calculations, computer files (such as spreadsheets, databases, statistical analysis), graphs, tables and/or charts prepared by the candidate

- review of records transcribed, maintained or stored by the candidate

- feedback from supervisors and peers

- questions to assess understanding of relevant procedures and trends in data

- observation of the candidate as they process data, file and store records.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

**Interdependent assessment of unit**

This unit of competency may be assessed with:

- technical units, such as the PMLTEST300 series and PMLTEST400 series of units

- PMLDATA501B Use laboratory application software.

## Resource implications

Resources may include:

- data sets and records

- computer and relevant software or laboratory information system

- relevant workplace procedures.

## This competency in practice

### Manufacturing

A laboratory assistant in a materials testing laboratory was performing routine tensile tests on samples of vinyl sheet. The assistant converted the readings from the machine to appropriate units using a simple calculation and recorded them in the logbook for that test method. After comparing these test results with previous results for the same type of vinyl material, the assistant found that the tensile strength was within the required range. However, it was at the lower rather than the upper end of the range as in previous testing. The assistant discussed the results with the laboratory supervisor. The calibration file for that machine showed that it had been calibrated four months previously and had not needed adjustment. Test results for the same period showed that the machine was giving lower than normal tensile strength readings for the few higher strength materials tested over the last two months. The assistant did some more checks and confirmed this trend. The machine was re-calibrated by the instrument company and the frequency of internal calibration checks by the laboratory assistant was increased. This problem would not have been detected or corrected as quickly without the assistant's initiative and competent recording and retrieval of test results and calibration information.

### Biomedical

A technical assistant works in a team with laboratory scientists and technical officers. Analyses of electrolytes are routine and occur in large volume throughput even in this small diagnostic laboratory. The assistant is assigned tasks that contribute to the overall production

of results, their reporting and the quality control evaluation of the results. One task is the daily collection of the electrolyte analyses from the internal quality control area. In this case, the technical assistant plots the results on a Levy-Jennings graph and computes the mean value. The assistant reports immediately to the supervisor if the plots show deviations which indicate out-of-control results.

**Food processing**

Cooking and holding temperatures greatly affect the nutrient composition of processed foods. The CSIRO provides documentation of nutrient losses with temperature variations. For cooked foods, there is the added problem of microbial growth in the so called 'danger zone'. In one laboratory, the technical assistant conducts simple testing of foods using a temperature probe and also measures the temperature of the storage areas, holding trays or bainmaries and individual tray units. Careful documentation of the temperatures of the foods and times of measurement must be kept. The technical assistant supplies the data as tables and a plot of temperature versus time. For quality control purposes, the assistant is directed to use a cross reference of mercury thermometer readings versus probe measurements for ambient temperature. The assistant plots the thermometer readings against the probe readings and reports to the supervisor if the plot shows a slope other than the defined value, for example, 450.

# Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 1 | Level 1 | Level 1 | Level 2 | Level 2 | Level 1 |

# PMLDATA500B Analyse data and report results

## Unit Descriptor

This unit of competency covers the ability to perform scientific calculations, analyse trends and uncertainty in data and report results within the required timeframe.

This unit of competency has the following prerequisite:

- PMLDATA400A Process and interpret data

This unit of competency is applicable to technical officers and laboratory technicians working in all industries.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These can be found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| Elements describe the essential outcomes of a unit of competency. | | Performance Criteria describe the level of performance required to demonstrate achievement of the element. | |
| 1. | Perform scientific calculations | 1.1 | Ensure raw data are consistent with expectations and reasonable ranges |
| | | 1.2 | Calculate scientific quantities involving algebraic, logarithmic, exponential, and power functions |
| | | 1.3 | Ensure calculated quantities are consistent with estimations |
| | | 1.4 | Present results using the appropriate units, uncertainties and number of significant figures |
| 2. | Analyse trends and relationships in data | 2.1 | Determine linear and non-linear relationships between sets of data |
| | | 2.2 | Prepare and analyse control charts to determine if a process is in control |
| | | 2.3 | Identify possible causes for out-of-control condition |
| | | 2.4 | Follow enterprise procedures to return process to in-control operation |
| 3. | Determine variation and/or uncertainty in data distributions | 3.1 | Organise raw data into appropriate frequency distributions |
| | | 3.2 | Calculate means, medians, modes, ranges and standard deviations for ungrouped and grouped data |
| | | 3.3 | Interpret frequency distributions to determine the characteristics of the sample or population |

| | | 3.4 | Calculate standard deviations and confidence limits for means and replicates |
| --- | --- | --- | --- |
| | | 3.5 | Determine the uncertainty in measurements using statistical analysis |
| | | 3.6 | Determine data acceptability using statistical tests and enterprise procedures |
| 4. | Check for aberrant results | 4.1 | Identify results that cannot be reconciled with sample, sample documentation, testing procedures and/or expected outcomes |
| | | 4.2 | Determine appropriate actions in consultation with supervisor as required |
| 5. | Report results | 5.1 | Use charts, tables and graphs to present results in the required format |
| | | 5.2 | Verify that entry of data and results is correct |
| | | 5.3 | Prepare reports in a format and style consistent with their intended use and enterprise guidelines |
| | | 5.4 | Communicate results within the specified time and in accordance with enterprise confidentiality and security guidelines. |

## RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

Data may be recorded on worksheets or entered into spreadsheets or databases linked to information management systems. Data includes the results of: tests, measurements, analyses and surveys.

Calculations may be performed with or without a calculator or computer software, such as spreadsheets, databases, statistical packages. Examples of calculations of scientific quantities could include:

- percentage and absolute uncertainties in measurements and test results

- dose (mg), dilution(1:10), concentration (molarity, g/mL, mg/L, ppm, ppb)

- pH, $[H+]$, $[OH-]$, buffer calculations, $K_a$, $pK_a$, $K_b$, $pK_b$, $K_w$

- solubility constants $K_s$, $pK_s$

- radioactivity: half life, dose, activity, exposure

- optical properties: absorbance/transmittance, path length, extinction coefficient, concentration (Beers law), detection limits

- electrical properties: conductivity, resistivity, dielectric constants

- mechanical properties: stress, strain, elastic moduli, yield strength, hardness

- thermal properties: heat capacity, thermal expansion, thermal conductivity, thermal resistance

- food content (%) of: water, ash, dietary and crude fibre, carbohydrate, protein, fat and specific vitamin

- quantities associated with quality control monitoring, assessment and reporting.

Graphical analysis could include:

- determination of linear, logarithmic, exponential and power relationships

- regression lines and interpretation of correlation coefficients.

Statistical analysis could include the use of:

- histograms, frequency plots, stem and leaf plots, boxplots, scatter plots

- probability, normal probability plots

- Pareto diagrams, Stewhart control charts, CuSum control charts

- regression methods for calibration, linearity checks, comparing analytical methods

- analysis of variance (ANOVA)

- data acceptability tests, such as Q, T and Youden.

Records could include information associated with:

- purchase of equipment and materials, service records

- safety procedures

- history of calibration and test results.

Reference materials could include:

- material data safety sheets

- equipment manuals and warranty, supplier catalogues, handbooks

- sampling and test procedures, standard operating procedures (SOPs)

- enterprise quality manual, customer quality plan

- OHS regulations, guidelines and procedures

- Australian Standards, NATA technical notes and National Measurement Act.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potentially hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

### Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate can:

- store, retrieve and manipulate data following document traceability procedures

- calculate scientific quantities relevant to their work and present accurate results in the required format

- analyse data to determine relationships between variables

- prepare frequency distributions for given data, calculate and interpret measures of central tendency and dispersion

- prepare and interpret control charts and take appropriate actions

- maintain the security and confidentiality of data in accordance with workplace and regulatory requirements

- report results in the required formats and expected timeframe.

### Underpinning knowledge

Competency includes the ability to apply and explain:

- procedures for data traceability

- procedures for verifying data and rectifying mistakes

- procedures for maintaining and filing records, security of data

- the characteristics of a valid measurement

- sources of uncertainty in measurements

- relevant scientific and technical terminology, such as: variables, dispersion, central tendency, process control, process stability, normal distribution, confidence level and replication.

- relevance/importance of the National Measurement Act to laboratory measurement, if applicable.

Competency also includes the ability to perform laboratory computations, such as:

- calculations involving fractions, decimals, ratios, proportions and percent

- evaluation of formulae containing powers, exponents, logarithms functions

- use of scientific notation, correct units, correct number of significant figures

- calculation of uncertainties

- preparation and interpretation of linear, semi-log and log-log graphs

- calculation and interpretation of statistical quantities, such as mean, median, mode, range, variance and standard deviation

- determination of regression line equations, correlation coefficients

- preparation and interpretation of more complex control charts and frequency distribution plots.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- review of data worksheets, calculations, computer files (such as spreadsheets, databases), statistical analysis, graphs and/or tables prepared by the candidate

- questions to assess understanding of relevant procedures, trends in data, sources of uncertainty

- review of reports prepared by the candidate

- feedback from supervisors and peers regarding the candidate's ability to analyse and report data in accordance with enterprise procedures.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

### Interdependent assessment of unit

This unit of competency may be assessed with:

- technical units, such as the *PMLTEST* '400' and '500' series units

- PMLDATA501B Use laboratory application software.

## Resource implications

Resources may include:

- data sets and records

- computer and relevant software or laboratory information system

- relevant workplace procedures.

## This competency in practice

### Manufacturing

Before pharmaceutical products can be approved for use in Australia, they must be tested for shelf-life in their Australian sales pack(s). The shelf-life of a preparation is the time of storage which results in a preparation becoming unfit for use, either through chemical decomposition of the active substance(s) or physical deterioration of the preparation. Stability profiles are determined by storing the preparation under a range of temperature conditions and evaluating it at predetermined time intervals. For example, a technical assistant may be required to evaluate the physical parameters of the new tablet to detect any changes in its appearance, hardness, friability, disintegration and dissolution profile. The assistant regularly assays the tablets using a stability indicating assay. The results are plotted and the information gained is used to predict the period of time for which the tablets will meet the appropriate standards for physical characteristics, purity and potency when stored under defined conditions.

### Biomedical

Supplementation of vitamins and minerals in the diet as a means to avert a clinical problem is a popular area of research, linking epidemiological and clinical investigation with food analyses. In the example of folate, such combined studies have led to the fortification of a number of foods and the requirement for folate supplementation for women of child bearing age. A typical project team would involve medical staff, a dietician and a scientific or technical officer to perform the assays. One possible line of study is to control the level of supplementation for the person and introduce the micronutrient in a dose form over and above that given in a controlled baseline diet. Blood samples would be collected and the serum micronutrient levels assayed. The technical officer would be responsible for keeping the statistical QC data and analysing the assays. The technical officer would work with the research team to correlate the serum levels with the dose input. To contribute effectively, the technical officer must understand the significance of the relationships between collected test data and the controlled experimental variables.

### Food processing

A State government analytical laboratory recently performed comparative assays of β-carotene using spectrometric (UV-VIS) and high performance liquid chromatography (HPLC) techniques. In any procedure where the assay is to be replaced, side by side analyses must be performed on multiple samples and the correlations between the data compared statistically. The two procedures are then developed or modified for local laboratories and a routine procedure developed. At this point, technical officers would assay the samples by the two methods. They would ensure that all procedures were followed with close attention to quality control. Precision would be assessed through frequent assays of the

same samples. Sensitivity of the assay would be assessed by performing the assay over a range of sample concentrations. The technical officers would carefully document the procedures and record all data for later validation. They may also provide preliminary graphical representations of data for their supervisor.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

## PMLSAMP302A Receive and prepare samples for testing

## Unit Descriptor

This unit of competency covers the ability to log samples, check sample documentation, schedule and prepare a range of samples for testing. All operations are performed in accordance with standard operating procedures (SOPs). This unit does not include testing, tissue processing or similar techniques.

This unit of competency is based on, and equivalent to, the unit *PMLSAMP301A Receive and prepare a range of samples for pathology testing* in PML99.

This unit of competency has no prerequisites.

This unit of competency is applicable to field and laboratory assistants in all industry sectors who receive and prepare samples as part/all of their jobs in a sample reception area.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1.   Log samples | 1.1   Record date (and time of arrival if required) of samples at enterprise |
| | 1.2   Check and match samples with request forms before they are accepted |
| | 1.3   Enter samples into the laboratory information management system (LIMS) |
| | 1.4   Apply required document tracking mechanisms |
| | 1.5   Process 'urgent' test requests according to enterprise requirements |
| | 1.6   Ensure security and traceability of all information, laboratory data and records |
| 2.   Address customer service issues | 2.1   Report to referring client when samples and request forms do not comply with enterprise requirements |
| | 2.2   Refer to supervisor for instruction where 'return to source' is inappropriate or not possible |
| | 2.3   Maintain confidentiality of all client/enterprise data and information |
| | 2.4   Ensure that information provided to customers is accurate, relevant and authorised for release |
| | 2.5   Deal with customers politely and efficiently and in accordance with enterprise procedures |

| | | | |
|---|---|---|---|
| 3. | Prepare samples for testing | 3.1 | Perform physical separation of the samples |
| | | 3.2 | Prepare the required number of sub-samples |
| | | 3.3 | Perform chemical separation of the samples as required |
| | | 3.4 | Place samples in appropriate transport media, if appropriate |
| | | 3.5 | Monitor and control sample conditions before, during and after processing |
| 4. | Distribute samples | 4.1 | Group samples requiring similar testing requirements |
| | | 4.2 | Distribute samples to work stations maintaining sample intergrity |
| | | 4.3 | Distribute request forms for data entry or filing in accordance with enterprise procedures |
| | | 4.4 | Check that samples and relevant request forms have been received by laboratory personnel |
| 5. | Maintain a safe work area and environment | 5.1 | Apply safe work practices to ensure personal safety and that of other laboratory personnel |
| | | 5.2 | Use appropriate protective equipment to ensure personal safety when sampling, processing, transferring or disposing of samples |
| | | 5.3 | Report all accidents and spillages to supervisor |
| | | 5.4 | Clean up splashes and spillages immediately using appropriate techniques and precautions |
| | | 5.5 | Minimise the generation of wastes and environmental impacts |
| | | 5.6 | Ensure the safe disposal of hazardous materials and other laboratory wastes. |

## RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

Information sources could include:

* Australian and international standards, such as:

    1.1 AS ISO/IEC 17025 General requirements for the competence of testing and

calibration laboratories

1.2 Office of the Gene Technology Regulator (OGTR) guidelines for working with genetically altered organisms

- enterprise operating procedures for preparing samples

- safety manuals describing personal protective equipment requirements; control of hazardous wastes; containment and cleanup of spillages; disposal and recycling of wastes

- procedure sheets indicating how samples and sub-samples are to be labelled, processed, distributed, flagged for urgent testing or for other non-routine requirements, including referral to external laboratories

- procedure sheets indicating transport and storage requirements

- procedure sheets for physical and chemical separation

- enterprise quality manuals

- material safety data sheets (MSDSs).

Where a laboratory routinely posts or couriers samples for testing, the International Air Transport Association (IATA) Dangerous Goods Regulations and Australia Post Regulations must be met.

Samples received may include:

- gas or air samples

- liquid samples, such as water, wastewater, stormwater, sludges and complex mixtures, sewage

- solid samples, such as soils, sediments, rocks/minerals, concrete, quarry or mining products

- solid wastes, such as hazardous, non-hazardous, domestic, commercial, industrial, mining, agricultural

- raw materials, start-, middle-, end- of production run samples, final products.

Hazards may include:

- biohazards, such as micro-organisms and agents associated with soil, air, water, blood and blood products, human or animal tissue and fluids

- dust and noise

- chemicals, such as acids and hydrocarbons

- aerosols

- sharps, broken glassware

- manual handling of heavy sample bags and containers

- crushing, entanglement, cuts associated with moving machinery.

Safe work practices may include:

- use of material safety data sheets (MSDSs)

- use of personal protective equipment, such as hard hats, hearing protection, gloves, safety glasses, goggles, face guards, coveralls, gown, body suits, respirators, safety boots

- use of biohazard containers and laminar flow cabinets

- correct labelling of reagents and hazardous materials

- handling, and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, enterprise procedures and regulations

- regular cleaning and/or decontamination of equipment and work areas.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potentially hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

- receives and logs samples in accordance with enterprise procedures

- checks samples for history and acceptable transport conditions

- applies standard precautions when dealing with hazardous materials

- applies knowledge of relationship(s) between specific sample preparation and associated tests

- promptly clarifies specific client requirements with appropriate personnel, as necessary

- performs sample preparation and sub-sampling in accordance with enterprise procedures

- labels and stores samples following enterprise procedures and maintains sample integrity, and traceability

- follows required sample disposal procedures

- maintains all equipment and workspace in accordance with enterprise procedures.

# Underpinning knowledge

Competency includes the ability to apply and explain:

- enterprise procedures for the receipt, documentation, distribution and storage of samples

- potentially hazardous and unstable nature of samples

- requirement of specified sample types for specific tests

- importance of accurate and complete labelling of samples

- importance of maintaining effective customer relations

- sample storage and transport requirements.

- relevant health, safety and environment requirements.

## Specific industry

Additional knowledge requirements may apply for different industry sectors. For example, in biomedical laboratories:

- potentially infective nature of all biological materials

- nature of unstable solutions, such as anti-coagulated whole blood

- non-conformance of clotted samples for procedures, such as routine haematological tests.

# Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- review of sample receipt and preparation records prepared by the candidate

- feedback from supervisors and peers

- direct observation of sample receipt and preparation

- questioning to assess knowledge of procedures where direct observation is difficult (such as sample receipt and preparation in the field).

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

## Interdependent assessment of unit

This unit of competency may be assessed with:

o    *PMLCOM300B Communicate with other people*

o    *PMLOHS302B Participate in laboratory/field workplace safety.*

## Resource implications

Resources may include:

- a selection of sample containers, tubes, request forms, sample documentation

- simulated samples when an authentic sample is unavailable or inappropriate.

## This competency in practice

### Environmental

A laboratory assistant at a hazardous liquid waste recycling plant is required to log in all samples, match all samples with the in-house profile of the source of the waste, label them and activate the tracking procedure. He/she then prepares a sample for a series of standard tests which are determined by the profile of the waste material (acid or alkali, organic or heavy metal, etc). Given the hazardous nature of the waste, the laboratory assistant must use appropriate safety equipment at all times and ensure the safe disposal of all hazardous material. The assistant must work efficiently as these procedures are activated upon arrival of a road tanker and when the hazardous waste has been verified and judged acceptable for treatment at the plant by the laboratory supervisor. The laboratory assistant also liaises with the truck driver, or the referring client, should the samples (and/or subsequent tests) not comply with enterprise conditions for receiving the hazardous waste.

### Construction materials and mineral assay

A laboratory assistant has received a consignment of disturbed soil samples from a client for classification testing. A test request and field logs have been sent by mail. Each sample is bagged and labelled, with the label showing the name of the client, project, date and sampling location, and a field description of the material. The laboratory policy is that samples weighing more than 20 kg must be bagged so that the individual bags do not exceed this limit and labelled as bag 1 of ..., bag 2 of ..., etc. The assistant checks to ensure all component bags of such samples are present. He/she is careful to handle the samples using safe manual handling techniques. The assistant arranges the samples in order of location and reconciles them with the test request and logs. Two samples have been shown on the request but have not been received. The assistant e-mails the technician who despatched them and subsequently is advised that they were overlooked during despatch and will be forwarded as soon as possible.

The assistant compares the samples with the field descriptions and finds that they match. Samples that are not designated for testing immediately are set aside in the laboratory store. The remainder are placed in trays for drying in the 50ºC oven. The tray numbers are carefully written on the respective worksheets. When the samples have dried and cooled they are split out sufficiently for sieve analysis and plasticity testing, making allowance for the maximum particle size of each sample. The assistant is careful to avoid raising dust during the process.

**Biomedical**

A laboratory assistant has just started a shift in specimen reception and puts on a coat and gloves before touching any samples. There is a pile of samples and forms in the sample box. In some cases, the samples and forms are enclosed in a plastic bag. In other cases, they are seemingly unconnected. The assistant notices that one of the samples has a bloodstained label. She/he quickly examines the samples, isolates the leaking sample in a lockable plastic bag and places the related request form in the bag's separate compartment. The assistant then disposes of her/his dirty gloves. The assistant now logs all samples into the computer, placing to one side a sample and request form that is inadequately labelled. She/he makes a note to call the referring doctor as soon as possible. The assistant places the haematology samples in the colour-coded tray and calls the laboratory for their pickup. She/he then calls the doctor of the patient whose sample is inadequately labelled. She/he records the missing date of birth on the request form, and then barcode/labels tubes for the samples' testing. Within 30 minutes, she/he has cleared the first rush of samples. She/he takes the time to carefully empty the bin of wastes.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 1 | Level 1 | Level 1 | Level 1 | Level 1 | Level 1 | Level 1 |

# PMLSAMP400B Obtain representative samples in accordance with sampling plan

## Unit Descriptor

This unit of competency covers the ability to obtain a range of samples that are representative of the source material (raw ingredients, product in process, final product) and to prepare the samples for testing. All sampling activities are to be in accordance with a defined sampling plan. This unit does not cover the subsequent testing of the samples.

This unit of competency has no prerequisites.

This unit of competency is applicable to laboratory technicians in all industry sectors covered by this Training Package.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1. Prepare for sampling | 1.1 Confirm the sampling location(s), number and type of samples, and timing and frequency of sampling from enterprise or client's sampling plan |
| | 1.2 Liaise with relevant personnel to arrange site access and (if appropriate) all necessary clearances and/or permits |
| | 1.3 Select sampling equipment and conditions to achieve representative samples and preserve sample integrity during collection, storage and transit |
| | 1.4 Check that all procedures are in accordance with client or enterprise requirements, relevant standards and codes |
| | 1.5 Identify site and sampling hazards and review enterprise safety procedures |
| | 1.6 Assemble and check all sampling equipment, materials, containers and safety equipment |
| | 1.7 Arrange suitable transport to, from and around site as required |

| | | | |
|---|---|---|---|
| 2. | Conduct sampling and log samples | 2.1 | Locate sampling sites and (if required) services at the site |
| | | 2.2 | Conduct representative sampling in accordance with sampling plan and defined procedures |
| | | 2.3 | Record all information and label samples in accordance with traceability requirements |
| | | 2.4 | Record environment or production conditions and any atypical observations made during sampling that may impact on sample representativeness or integrity |
| | | 2.5 | Transport all samples back to base according to standard operating procedures (SOPs) and relevant codes |
| 3. | Prepare samples for testing | 3.1 | Prepare sub-samples, back-up sub-samples that are representative of the source |
| | | 3.2 | Label all sub-samples to ensure traceability and store in accordance with SOPs |
| | | 3.3 | Follow defined preparation and safety procedures to limit hazard or contamination to samples, self, work area and environment |
| | | 3.4 | Distribute sub-samples to defined work stations maintaining sample integrity and traceability requirements |
| 4. | Address client issues | 4.1 | Enter approved information into laboratory information management system (LIMS) |
| | | 4.2 | Report all relevant aspects of the sampling and preparation phases in accordance with enterprise procedures |
| | | 4.3 | Ensure that information provided to client is accurate, relevant and authorised for release |
| | | 4.4 | Maintain security and confidentiality of all client/enterprise data and information |
| 5. | Maintain a safe work environment | 5.1 | Clean all equipment, containers, work area and vehicles according to enterprise procedures |
| | | 5.2 | Check serviceability of all equipment before storage |
| | | 5.3 | Use defined safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel |

5.4     Minimise the generation of wastes and environment impacts

5.5     Ensure the safe collection of all hazardous wastes for appropriate disposal

# RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

This unit of competency may cover laboratories or processing sites and may involve:

- a range of sampling plans, samples and sampling procedures, which apply to the enterprise site, plant laboratory or field sites

- enterprise products/materials, hazardous materials

- a range of sampling points and/locations

- methods and procedures which may be written to meet enterprise, client and/or regulatory/certifying body requirements.

Samplers usually have access to information, such as:

- enterprise and/or client sampling schemes and sampling plans

- industry methods, such as American Association of Cereal Chemists (AACC) Preparation of samples

- enterprise and/or client procedures

- material safety data sheets (MSDSs)

- relevant Australian Standards, such as:

    1.3 AS 1678 Emergency procedures guide for hazardous materials

    1.4 AS 2500 Storage of goods

    1.5 AS 2503 Safety storage and handling of information cards

    1.6 AS 1940 Storage and handling of flammable and combustible liquids

    1.7 AS 3780 Storage and handling of corrosive liquids

    1.8 AS 4452 Storage and handling of toxic substances

    1.9 Australian Dangerous Goods Code

    1.10   Australian Code for Transport of Dangerous Goods

    1.11   National Code of Practice for the labelling of workplace substances (NOHSC:2012)

- site plans, maps and specifications

- enterprise recording and reporting procedures.

Materials sampled may include:

- gas or air samples

- liquid samples, such as water, groundwater, wastewater, stormwater, sludges, sewage

- solid samples, such as soil, sediments, rocks, concrete, quarry and mining material

- solid wastes

- raw materials, start-, middle-, end-of production run samples, final products, materials used in production processes, such as flocculants

- plants

- animals

- microbiological samples.

Types of samples may include:

- grab samples

- composite samples

- quality control samples

- research or one-off samples

- environmental or survey samples.

Sampling tools and equipment may include but are not limited to:

- shovels, augers, chain saws

- sampling frames, sampling tubes, dip tubes, spears, flexible bladders, syringes

- front-end loader, backhoe, excavator, drill rig

- sample bottles or containers, plastic containers and disposable buckets

- access valves

- sample thief

- auto samplers

- pumps, stainless steel bailers

- traps and cages

- sterile containers, pipettes, inoculating loops, disposable spoons.

Maintenance of integrity of samples could include:

- use of compatible container, such as glass, plastic, amber, opaque bottles

- use of appropriate preservatives, such as sodium azide, toluene or antibiotics

- decontamination of sampling tools between collection of consecutive samples

- wrapping container in foil

- purging of sample lines and boxes

- handling and transport to avoid disturbance or damage

- temperature control which may involve insulation of sample without direct contact with the coolant

- wrapping in wet newspaper, cloth, sand or sawdust

- transfer of sterile sample into sterile container

- monitoring of storage conditions.

Site and sampling hazards may include:

- solar radiation, dust and noise

- wildlife, such as snakes, spiders, domestic animals

- biohazards, such as micro-organisms and agents associated with soil, air, water, blood and blood products, human or animal tissue and fluids

- chemicals, such as acids and hydrocarbons

- aerosols

- sharps, broken glassware

- manual handling of heavy sample bags and containers

- crushing, entanglement, cuts associated with moving machinery and hand tools

- vehicular and pedestrian traffic.

Safety procedures may include:

- use of material safety data sheets (MSDSs)

- use of personal protective equipment, such as hard hats, hearing protection, gloves, safety glasses, goggles, face guards, coveralls, gown, body suits, respirators, safety boots

- use of biohazard containers and laminar flow cabinets

- correct labelling of reagents and hazardous materials

- handling, and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, enterprise procedures and regulations

- regular cleaning and/or decontaminating equipment and work areas

- machinery guards

- signage, barriers, service isolation tags, traffic control, flashing lights

- lockout and tagout procedures.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potential hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

- collects the specified quantity of sample to enable all processing and testing to occur and backup samples to be stored

- obtains a sample that is representative of the bulk material

- preserves the integrity of samples by closely adhering to procedures

- labels samples and sub-samples to satisfy enterprise/legal traceability requirements

- identifies atypical materials and samples and takes appropriate action

- maintains sampling equipment in appropriate condition

- completes sampling records using enterprise procedures

- follows safety regulations and enterprise OHS procedures during sampling, transport and storage

- follows relevant legislative requirements for the disposal of waste and the preservation of the environment.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- the links between correct OHS procedures and personal and environmental safety particularly at high risk sites

- the basic principles of sampling, including:

- representative samples

- preservation of integrity of samples

- maintaining identification of samples relative to their source, enterprise and legal traceability

- cost effectiveness of sampling

- consistency of sampling procedures

- sampling principles, including random, systematic, stratified sampling

- characteristics of product/material to be sampled and likely contaminants

- links between quality control, quality assurance and quality management systems and sampling procedures

- enterprise procedures dealing with legislative requirements for the handling, labelling and transport of hazardous goods

- enterprise and/or legal traceability requirements

- relevant health, safety and environment requirements.

**Specific industry**

Additional knowledge requirements may apply for different industry sectors. For example, for biomedical and environmental services:

- specific legislation on biohazards

- guidelines for infection control in the health-care setting

- OGTR Guidelines for the handling of genetically manipulated cells

- documentation procedures for the chain of custody for samples to be used as evidence or for blood transfusion.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- inspection of samples collected by the candidate

- review of sampling documentation completed by the candidate

- feedback from peers, customers and supervisors that sampling plans were followed

- questioning to assess underpinning knowledge of representative sampling procedures

- observation of the candidate taking a range of samples.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

**Interdependent assessment of unit**

This unit of competency may be assessed with:

- PMLDATA400A Process and interpret data

o    *PMLOHS302A Participate in laboratory/field workplace safety*

o    *any of the PMLTEST400 and PMLTEST500 series units relevant to the sampling.*

# Resource implications

Resources may include:

- variety of sample types

- sampling plans

- a selection of sampling containers and sampling equipment.

# This competency in practice

## Manufacturing

A metallurgical laboratory technician is very familiar with preparing representative samples for a range of final products in a steel-making plant. One day, he/she is asked to sample a 50 tonne small-particle coal delivery which is believed to have a higher than acceptable sulphur content. Having never prepared representative samples for such a large quantity of material, the technician consulted their supervisor and developed an appropriate sampling plan. The technician arranged for the operator of a small front end loader to take buckets of coal from five equally spaced points around the pile. The resulting material was then combined and mixed in one heap. The technician coned and quartered the heap enough times to obtain a representative sample of about 5kg. He/she arranged for the unwanted material to be returned to the stockpile. On return to the laboratory, the technician crushed the sample and repeatedly coned and quartered the material to obtain an analytical portion.

## Environmental

A field technician trained in sampling natural water systems is asked to sample a bright yellow industrial wastewater discharge into a small creek. The relevant sampling plan specifies that the samples should be collected where the waste water is well mixed near the centre of the creek and at the mid-depth point. The technician also notes that the samples must be collected where turbulence is at a maximum so that the settling of solids is minimal. On arrival at the site, the technician locates where the wastewater is entering the creek. He/she moves downstream to where the waste water and creek water is well mixed and there is little apparent loss of the yellow suspended solids. The technician dons the required PPE and uses
a convenient bridge to collect a set of six samples and duplicates over a half-hour period using the equipment and procedures specified in the sampling plan. Using a field notebook,

the technician records all information specified in the laboratory's chain of custody requirements and safety plan for handling potentially hazardous industrial waste.

# Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

# PMLTEST300B Perform basic tests

## Unit Descriptor

This unit of competency covers the ability to perform tests using standard methods and with access to readily available advice. Personnel are required to demonstrate close attention to the accuracy and precision of measurements and the data obtained. In general, they do not calibrate equipment and make only limited adjustments to the controls. The unit of competency does not cover interpretation or analysis of results or troubleshooting equipment problems.

This unit competency has no prerequisites.

This unit of competency is applicable to laboratory/field assistants working in all industry sectors.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1. Interpret test requirements | 1.1 Review test request to identify samples to be tested, test method and equipment involved |
| | 1.2 Identify hazards and enterprise controls associated with the sample, preparation methods, reagents and/or equipment |
| 2. Prepare sample | 2.1 Record sample description, compare with specification, record and report discrepancies |
| | 2.2 Prepare sample in accordance with appropriate standard methods |
| 3. Check equipment before use | 3.1 Set up test equipment in accordance with test method |
| | 3.2 Perform pre-use and safety checks in accordance with enterprise procedures and manufacturer's instructions |
| | 3.3 Identify faulty or unsafe equipment and report to appropriate personnel |
| | 3.4 Check calibration status of equipment and report any out of calibration items to appropriate personnel |

| 4. | Perform tests on samples | 4.1 | Identify, prepare and weigh or measure sample and standards to be tested |
|----|----|----|----|
| | | 4.2 | Conduct tests in accordance with enterprise procedures |
| | | 4.3 | Record data in accordance with enterprise procedures |
| | | 4.4 | Perform calculations on data as required |
| | | 4.5 | Identify and report 'out of specification' or atypical results promptly to appropriate personnel |
| | | 4.6 | Shut down equipment in accordance with operating procedures |
| 5. | Maintain a safe work environment | 5.1 | Use established safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel |
| | | 5.2 | Minimise the generation of wastes and environmental impacts |
| | | 5.3 | Ensure safe disposal of laboratory and hazardous wastes |
| | | 5.4 | Clean, care for and store equipment and reagents as required. |

# RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

This unit of competency describes the work conducted by supervised laboratory assistants who perform a range of basic tests and measurements.

All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements. These procedures include or have been prepared from:

- Australian and international standards, such as:

    1.12 AS ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories

    1.13 AS/NZS 2243.2 Chemical aspects

    1.14 AS 2243.6 Mechanical aspects

    1.15 AS 2243.10 Storage of chemicals

    1.16 AS 2830 Good laboratory practice

- Codes of Practice (such as GLP and GMP)

- material safety data sheets (MSDSs) and safety procedures

- standard operating procedures (SOPs)

- equipment manuals

- equipment startup, operation and shutdown procedures

- calibration and maintenance schedules

- quality manuals

- enterprise recording and reporting procedures

- production and laboratory schedules

- material, production and product specifications.

- Codes of Practice.

Preparation of samples can include:

- sub-sampling or splitting using procedures, such as: riffling, coning and quartering, manual and mechanical splitters

- diluting samples

- physical treatments, such as ashing, dissolving, filtration, sieving, centrifugation and comminution

- moulding, casting or cutting specimens.

Typical tests carried out by laboratory/field assistants could include:

- visual/optical tests of appearance, colour, texture, identity, turbidity, refractive index (alcohol content, Baume/Brix)

- physical tests, such as:

    1.17  density, specific gravity, compacted density

    1.18  moisture content, water activity

    1.19  particle size, particle shape, size distribution

- chemical tests, such as:

    1.20  gravimetric

    1.21  colorimetric

    1.22  electrical conductivity (EC), pH

- specific ions using dipsticks and kits

- nutrients (for example nitrates, orthophosphates) using basic kits

- ashes, including sulphated ashes

- biological/environmental tests, such as:

    1.23   pH, oxygen reduction potential (ORP), dissolved oxygen (DO), electrical conductivity

    1.24   E coli using test kits

- surface hygiene/presence of microbes

- packaging tests, such as:

    1.25   tearing resistance, bursting strength, impact resistance

    1.26   permeability and/or leakage

- mechanical tests, such as:

    1.27   Emerson class

    1.28   concrete slump

Other measurements may include:

- simple ground surveys

- meteorological parameters, such as: wind direction/strength, rainfall, max./min. temperature, humidity, solar radiation

- simple background radiation survey

- production/process parameters, such as temperature, flow, pressure

- gas levels in a confined space.

Common measuring equipment may include:

- dimension apparatus

- dissolved oxygen (DO), electrical conductivity (EC)

- analogue and digital meters, charts/recorders

- basic chemical and biological test kits

- dipsticks and site test kits (for example, HACK)

- timing devices

- temperature measuring devices, such as thermometers, thermocouples.

Hazards may include:

- electric shock

- biohazards, such as microbiological organisms and agents associated with soil, air, water, blood and blood products, human or animal tissue and fluids

- solar radiation, dust, noise

- chemicals, such as: sulphuric acid, fluorides, hydrocarbons

- aerosols

- sharps, broken glassware and hand tools

- flammable liquids

- dry ice and liquid nitrogen

- fluids under pressure

- sources of ignition

- occupational overuse syndrome, slips, trips and falls

- manual handling, working at heights and in confined spaces

- crushing, entanglement, cuts associated with moving machinery or falling objects.

Enterprise controls to address hazards may include:

- use of material safety data sheets (MSDS)

- use of signage, barriers and service isolation tags

- use of personal protective equipment, such as hard hats, hearing protection, sunscreen lotion, gloves, safety glasses, goggles, face guards, coveralls, gown, body suits, respirators and safety boots

- use of appropriate equipment, such as biohazard containers and cabinets, laminar flow cabinets

- recognising and observing hazard warnings and safety signs

- labelling of samples, reagents, aliquoted samples and hazardous materials

- handling and storage of all hazardous materials and equipment in accordance with labelling, materials safety data sheets and manufacturer's instructions, enterprise procedures and regulations

- cleaning and decontaminating equipment and work areas regularly using recommended procedures

- following established manual handling procedures for tasks involving manual handling.

Minimising environmental impacts may involve:

- recycling of non-hazardous waste, such as chemicals, batteries, plastic, metals, glass

- appropriate disposal of hazardous waste

- correct disposal of excess sample/test material

- correct storage and handling of hazardous chemicals.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potentially hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

- interprets enterprise procedure or standard methods accurately

- uses safety information (for example, MSDSs) and performs procedures safely

- checks test equipment before use

- completes all tests within required timeline without sacrificing safety, accuracy or quality

- calculates, records and presents results accurately and legibly

- maintains security, integrity and traceability of all samples, data/results and documentation

- cleans and maintains equipment.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- purpose of test

- principles of the standard method

- pre-use equipment checks

- relevant standards/specifications and their interpretation

- sources of uncertainty in measurement and methods for control

- enterprise and/or legal traceability requirements

- interpretation and recording of test result, including simple calculations

- procedures for recognition/reporting of unexpected or unusual results

- relevant health, safety and environment requirements.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- review of the quality of test data/results achieved by the candidate over time

- inspection of records and workplace documentation completed by the candidate

- feedback from peers and supervisors

- observation of the candidate performing a range of basic tests

- oral or written questioning to check underpinning knowledge of test procedures.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

### Interdependent assessment of unit

This unit of competency may be assessed with:

o *PMLDATA200A Record and present data.*

## Resource implications

Resources may include:

- standard laboratory equipped with appropriate equipment standards and materials

- enterprise procedures and standard methods, equipment manuals

- material safety data sheets (MSDSs).

## This competency in practice

### Manufacturing

Standard testing methods may be viewed as 'legal' requirements that must be followed to ensure that a product manufactured in a chemical plant meets the specification by which it is sold to the customer. Technical assistants perform tests in a quality control laboratory to ensure that material meets 'legal' requirements and the material is safe and effective in use. Peroxides may be present in ether as a result of light-catalysed air oxidation. Peroxides are toxic and can give rise to mixtures which are explosive when distilled. Technical assistants test ether to ensure that the level of peroxide is within acceptable limits. The test is done by shaking ether with a solution of potassium iodide. After standing for 30 minutes in the dark the yellow colour of the aqueous phase, due to the liberation of iodine, must not be

more intense than a prepared standard solution. These tests ensure the quality and safety of the ether.

### Food processing

A Snack Food Company produces a range of high quality, impulse purchase snack foods. Some of these products are moisture and/or oxygen sensitive and are therefore packaged in multi-layer flexible packaging to provide optimum shelf-life. The packaging must also be able to withstand the rigours of the production and distribution process. While the packaging is purchased to meet the shelf-life and distribution specifications, the quality assurance program requires the periodic evaluation of the packaging materials against these specifications. A laboratory assistant uses standard methods to test the tearing resistance, bursting strength, impact resistance and permeability and/or leakage of the snack food packaging. Tests are also conducted on aspects of the manufacturing process that can affect shelf-life. These tests involve the measuring of the heat-seam strength and the sealing performance of the closure process. The test results are recorded by the laboratory assistant to verify the conformance of the materials to the supplier specifications and of the process to the manufacturing specifications. The assistant reports any anomalies or non-conformances to the appropriate personnel.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 1 | Level 1 | Level 1 | Level 1 | Level 1 | Level 1 | Level 1 |

# PMLTEST303B Prepare working solutions

## Unit Descriptor

This unit of competency covers the ability to prepare working solutions and to check that existing stocks are suitable for use. This unit assumes that calculations of quantities, choice of reagent grades and required dilutions will be specified by the supervisor.

This unit of competency has no prerequisites.

This unit of competency is applicable to laboratory assistants working in all industry sectors.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1. Safely use laboratory chemicals, glassware and equipment | 1.1 Apply appropriate safety precautions for use of laboratory equipment and hazardous chemical materials |
| | 1.2 Use appropriate laboratory glassware and measuring equipment |
| | 1.3 Clean and store glassware and equipment in accordance with enterprise procedures |
| 2. Make up working solutions | 2.1 Identify the relevant standard methods for solution preparation |
| | 2.2 Assemble specified laboratory equipment |
| | 2.3 Select and prepare materials and solvent of specified purity |
| | 2.4 Measure appropriate quantities of reagents for solution preparation and record data |
| | 2.5 Measure appropriate quantities of reagents for solution preparation and record data |
| | 2.6 Transfer solutions to appropriately labelled containers |

3.  Check existing stock of solutions

3.1  Monitor shelf-life of working solutions as per laboratory procedures

3.2  Replace out-of-date or reject solutions as per laboratory procedures

3.3  Conduct routine titrimetric analyses, if appropriate, to determine if solutions are fit for purpose.

## RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

This unit of competency describes the work conducted by supervised laboratory assistants who prepare a range of working solutions for laboratory use. Test solutions include those required to perform laboratory tests. All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements. These procedures include or have been prepared from:

-   Australian and international standards, such as:

    1.29  AS 2162.1 General — volumetric glassware

    1.30  AS 2163 Laboratory glassware — measuring cylinders

    1.31  AS 2165 Laboratory glassware — burettes

-   industry methods, such as American Association of Cereal Chemists (AACC) Solution methods

-   Codes of Practice, such as GLP and GMP

-   material safety data sheets (MSDSs)

-   National Measurement Act

-   standard operating procedures (SOPs)

-   equipment manuals

-   equipment startup, operation and shutdown procedures

-   calibration and maintenance schedules

-   quality manuals

-   enterprise recording and reporting procedures

-   production and laboratory schedules

-   material, production and product specifications.

The nature of test solutions will depend on the enterprise and the range of testing carried out. Typical test solutions may include:

- solutions required for diagnostic/analytical and limit tests in food and chemical laboratories, such as sulphates, chlorides, heavy metals

- solutions, such as stains for standard diagnostic/analytical procedures in biomedical/environmental laboratories, such as cell staining, fixation of cells and tissues, suspension of cells, titrimetric indicators

- solutions required for laboratory maintenance and disinfection, such as 70% ethanol, hypochlorite.

Laboratory equipment may include:

- pH meters

- balances

- magnetic stirrers, waterbaths and hot plates

- measuring cylinders, beakers, conical flasks, volumetric flasks, pipettes, burettes

- filter papers and funnels

- fume cupboards.

Hazards may include:

- corrosive chemicals, such as acids and alkalis

- sources of heat, such as burners

- sharps, broken glassware

- spillages.

Safety precautions may include:

- use of material safety data sheets (MSDSs)

- use of personal protective equipment, such as safety glasses, gloves and coveralls

- correct labelling of reagents and hazardous materials

- handling and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, enterprise procedures and regulations

- regular cleaning and/or decontamination of equipment and work areas.

Monitoring quality of solutions can include:

- noting turbidity to exclude absorption of moisture

- noting deposits to exclude microbial contamination or chemical degradation

- noting crystals to exclude evaporation

- conducting titrations to check concentration

- noting colour changes indicating a pH shift with solutions containing indicators

- checking expiry dates on solution containers.

Concentration terms may include: % w/w, % w/v, % v/v, ppm (mg/L), molarity.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potentially hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, the assessor should look to see that the candidate:

- uses appropriate materials, equipment and procedures to prepare solutions

- follows appropriate OHS (and hygiene, if appropriate) procedures

- uses all equipment safely, efficiently and in accordance with enterprise procedures

- uses enterprise procedures to calculate concentrations

- identifies solutions not fit for use

- uses titrations to determine the concentration of solutions

- labels, stores and disposes of solutions appropriately

- records and present data appropriately.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- relevant biological, chemical, food and laboratory terminology

- basic theory of acids, bases, salts, buffers and neutralisation

- enterprise procedures for preparing solutions

- calculations required to prepare specified amounts of solutions of specified concentration

- appropriate OHS procedure for preparing, handling and disposal of solutions

- use of MSDSs

- relevant health, safety and environment requirements.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- inspection of solutions prepared, labelled and stored by the candidate

- review of solution records and workplace documentation completed by the candidate

- feedback from peers, and supervisors

- observation of the candidate preparing working solutions

- oral or written questioning.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

### Interdependent assessment of unit

This unit of competency may be assessed with:

- PMLDATA200A Record and present data

- PMLOHS302A Participate in laboratory/field workplace safety.

## Resource implications

Resources may include:

- standard laboratory equipped with appropriate equipment and reagents

- standard operating procedures and testing methods

- access to appropriate containers and storage facilities.

## This competency in practice

### Manufacturing

When starting materials used for the manufacture of common household materials are in transit from the supplier to the manufacturer, they may degrade if subjected to conditions, such as heat, moisture, light and oxygen. Even when the supplier ships quality materials to the manufacturing plant, the materials may be substandard when they arrive. Quality control tests are designed to test starting materials to ensure they are within specification. For

example, aspirin forms salicylic acid when stored under adverse conditions. Laboratory assistants prepare and monitor the quality of solutions, such as ferric chloride solution, which gives an intense violet colour when added to salicylic acid but gives no colour with aspirin. Absence of the violet colouration indicates that breakdown of the aspirin hasn't occurred.

**Biomedical**

A laboratory assistant made up 1 litre of buffer solution using buffer tablets and a 1 litre volumetric flask as specified in the method. To ensure the solution was suitable for use, the assistant measured the pH and found it was within acceptable range. The assistant then appropriately labelled a storage vessel and stored the buffer according to requirements. By following enterprise procedures the shelf life of the buffer was maximised.

**Environmental**

An environmental laboratory is contracted to determine the acidity of water samples taken from local lakes and streams. A laboratory assistant is required to make up small batches of 0.01M sodium hydroxide and to determine its concentration by titrating it against a standard solution of potassium acid phthalate using phenolphthalein indicator. This procedure is carried out monthly to ensure that the concentration of the sodium hydroxide solution is accurately known. Alternatively, the laboratory assistant may be required to prepare and standardise a fresh batch of sodium hydroxide on a monthly basis. In this case, he/she must understand the underpinning knowledge of basic acid/base theory, potential problems of interferences (such as slow absorption of carbon dioxide by sodium hydroxide solution) so as to ensure that the concentrations of workup solutions are accurately known. He/she must also be skilled in calculating and performing dilution when required to prepare such low concentrations (0.01M) of working solutions.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 1 | Level 1 | Level 1 | Level 1 | Level 1 | Level 1 | Level 1 |

# PMLTEST307B Prepare trial batches for evaluation

## Unit Descriptor

This unit of competence covers the ability to prepare trial batches of materials for evaluation. Materials can include soil, minerals and manufactured products, such as concrete, asphalt, food, plastics, paint and other industrial chemicals.

This unit of competency has no prerequisites.

This unit of competency is applicable to laboratory assistants working in all industry sectors.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1. Prepare for trial batch mixing | 1.1 Identify the job, materials, appropriate procedures and safety requirements |
| | 1.2 Record description of the job to be undertaken, compare with specification and report any variations |
| | 1.3 Select and prepare tools, equipment and materials in accordance with job requirements |
| | 1.4 Confirm the properties and quantities of materials to be used |
| | 1.5 Confirm that the required materials are available and ready for use |
| 2. Mix trial batch for evaluation | 2.1 Measure out quantities of materials ready for mixing |
| | 2.2 Mix the materials according to established procedures |
| | 2.3 Discharge the mixture ready for inspection and testing according to established procedures |
| | 2.4 Record details of the mix and any observations according to established procedures |

| 3. | Evaluate properties of the mixture by inspection and standard test methods | 3.1 | Obtain representative samples of the mix for testing |
| | | 3.2 | Perform specified tests according to established procedures |
| | | 3.3 | Handle and transport samples in accordance with established procedures |
| | | 3.4 | Label samples and record details in accordance with established procedures |
| 4. | Clean equipment and dispose of materials | 4.1 | Clean mixing, measuring, sampling and testing equipment after use |
| | | 4.2 | Return unused materials to storage |
| | | 4.3 | Dispose of excess materials safely and ethically |
| 5. | Maintain records | 5.1 | Record data in accordance with established procedures |
| | | 5.2 | Maintain equipment records in accordance with established procedures |
| | | 5.3 | Maintain confidentiality of enterprise information |
| 6. | Maintain a safe work environment | 6.1 | Use established safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel |
| | | 6.2 | Minimise the generation of wastes and environmental impacts |
| | | 6.3 | Ensure safe disposal of laboratory and hazardous wastes |
| | | 6.4 | Clean, care for and store equipment and reagents as required. |

# RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

This unit of competence describes work conducted by laboratory assistants, generally working under the guidance of a senior technician, scientific officer, laboratory supervisor/manager. Operations are performed in accordance with laboratory and/or enterprise procedures, and appropriate legislative requirements. These procedures and requirements can include or be prepared from:

- industry Codes of Practice

- environmental legislation and regulations

- standard operating procedures (SOPs)

- equipment manuals

- equipment start-up, operation and shutdown procedures

- calibration and maintenance schedules

- quality manuals

- enterprise recording and reporting procedures

- production and laboratory schedules

- material, production and product specifications.

Materials, tools and equipment used may include:

- soils, concrete, asphalt, aggregates, polymers, ceramics, metals, foodstuffs, solvents

- ovens, sieves, balances, volumetric measures, mixers

- hand tools, including shovels, scoops, spatulas

- consumables, including sample bags, labels

- documentation, including specifications, manufacturers' handbooks, worksheets

- test equipment appropriate to the various materials.

Typical skills may include:

- working safely with equipment and hazardous materials

- working safely in laboratory conditions

- setting up and maintaining tools and equipment

- using tools and equipment to perform basic sampling techniques

- using tools and equipment to perform basic testing techniques

- basic calculations

- observing and recording information on testing and sampling

- making basic measurements of volume and mass

- handling and storing materials appropriately.

Typical problems may include:

- not following standard operating procedures

- measurement errors

- calculation errors

- materials of unreliable quality

- insufficient mixing

- poor sampling procedures

- equipment breakdown and breakage.

Hazards may include:

- electric shock

- biohazards, such as microbiological organisms and agents associated with soil, air, water

- solar radiation, dust, noise

- chemicals

- sharps, broken glassware and hand tools

- flammable liquids and gases

- fluids under pressure

- manual handling heavy objects

- crushing, entanglement, cuts associated with moving machinery or falling objects.

Safety procedures may include:

- recognising hazard warnings and safety signs

- use of personal protective equipment, such as hard hats, hearing protection, sunscreen lotion, gloves, safety glasses, goggles, face guards, coveralls, safety boots

- use of material safety data sheets (MSDS)

- following established manual handling procedures

- regular cleaning and/or decontaminating of equipment and work areas

- ensuring access to service shut off points

- identifying and reporting operating problems or equipment malfunctions.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potentially hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and

Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

# EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

- calculates batch quantities, concentrations and other relevant parameters

- follows standard operating procedures

- measures quantities accurately

- takes representative samples

- identifies and describes materials accurately

- handles and transports samples correctly

- records sampling and testing information

- uses tools and equipment effectively and efficiently

- observes, interprets and reports atypical situations

- communicates problems to appropriate personnel

- records and communicates work results

- works safely

- interprets information from materials safety data sheets.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- the properties of mixing materials and how they affect the properties of the final product

- hazards involved with materials and equipment involved

- measurement of mass and volume

- basic calculations involving SI units, proportion, ratio, and percentage

- representative sampling

- uses of various materials/enterprise products

- basic testing methods for relevant materials

- enterprise traceability requirements

- relevant health, safety and environment requirements.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- analysis of trial batches prepared by the candidate over a period of time to ensure accurate and consistent work is obtained within required timelines

- inspection of workplace documentation completed by the candidate

- feedback from peers and supervisors

- use of suitable simulation and/or a range of case studies/scenarios

- In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

### Interdependent assessment of unit

This unit of competency may be assessed with:

- PMLSAMP302A Handle and transport samples or equipment

- PMLSAMP400B Prepare representative samples in accordance with a sampling plan

- PMLTEST300B Perform basic tests.

## Resource implications

Resources may include:

- standard facility with appropriate tools, equipment and materials

- enterprise procedures, MSDS, product formulation/specifications.

## This competency in practice

### Construction materials

A laboratory assistant works for a concrete manufacturer. A client requires concrete for a specific project that cannot be supplied using existing standard mixes. The manufacturer must use special aggregates and cement to meet the durability and strength specifications for the project. The laboratory manager obtains quantities of the materials for evaluation purposes. The assistant tests the aggregates to determine their grading properties. From these results, he/she designs a mix to satisfy the project specifications using a standard design method.

The mix requires the use of pozzolanic materials and admixtures that were obtained from the suppliers.

The manager provides the assistant with the batch quantities required to produce one cubic metre of concrete. To test the mix design, the assistant will produce a 20-litre batch in the laboratory. She/he calculates that this quantity will provide sufficient material for the required tests, without undue waste. She/he calculates the quantity of each material required for the trial batch. The assistant selects and prepares the tools and equipment she/he needs to mix, sample and test the concrete. She/he wears overalls, safety boots and glasses, and uses a barrier cream. She/he measures out the quantities required for the trial batch, charges the mixer and allows it to mix for the specified time. She/he then discharges the concrete onto a suitable surface. She/he checks its slump, cohesiveness and air content, recording the data on standard enterprise forms.

The manager inspects the concrete, and decides that it is over-sanded and has excessive slump. She/he adjusts the batch quantities and draws up amended values. She/he disposes of the excess concrete and cleans the equipment and tools.

She/he then mixes a new batch using the amended figures. This process continues until the manager is satisfied with the concrete quality. She/he then mixes a larger batch so that she/he can prepare specimens for testing its hardened-state properties.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 1 | Level 1 | Level 1 | Level 1 | Level 1 | Level 1 | Level 1 |

# PMLTEST402B Prepare, standardise and use solutions

## Unit Descriptor

This unit of competency covers the ability to prepare, standardise and use solutions to monitor the quality of prepared solutions.

This unit of competency has no prerequisites.

This unit of competency is applicable to laboratory technicians working in all industries.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1. Prepare solutions | 1.1 Select appropriate procedure for solution preparation |
| | 1.2 Select equipment, materials and solvent of specified purity |
| | 1.3 Measure appropriate quantities of reagents for solution preparation and record data. |
| | 1.4 Select and assemble specified laboratory equipment and appropriate grade of glassware |
| | 1.5 Perform specified dilutions |
| | 1.6 Prepare solutions to achieve homogeneous mix of the specified concentration |
| | 1.7 Label and store solutions to maintain identity and stability |
| 2. Standardise and use volumetric solutions | 2.1 Assemble appropriate laboratory equipment |
| | 2.2 Perform serial dilutions as required |
| | 2.3 Standardise the solution to the required specified range and precision |
| | 2.4 Label and store solutions to maintain identity and stability |
| | 2.5 Use standard volumetric solutions to determine concentration of unknown solutions |

| 3. | Calculate and record data | 3.1 | Calculate specified concentrations |
|---|---|---|---|
| | | 3.2 | Use authorised procedure if data is to be modified |
| | | 3.3 | Record all relevant details as per laboratory procedures and report results |
| | | 3.4 | Report concentration with appropriate units |
| 4. | Monitor the quality of laboratory solutions | 4.1 | Check solutions for visual deterioration and expiry date |
| | | 4.2 | Restandardise or dispose of dated or deteriorated solutions |
| | | 4.3 | Record details and label solutions as per laboratory procedures. |
| 5. | Maintain a safe work environment | 5.1 | Use established safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel |
| | | 5.2 | Clean up spills using appropriate techniques to protect personnel, work area and environment |
| | | 5.3 | Minimise generation of waste and environmental impacts |
| | | 5.4 | Ensure the safe collection of laboratory and hazardous waste for subsequent disposal |
| | | 5.5 | Store equipment and reagents as required. |

## RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

This unit of competency describes the work conducted by laboratory technicians who prepare, standardise and use solutions and monitor the quality of the prepared solutions.

All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements. These procedures may include or have been prepared from:

- Australian and international standards, such as:

    1.32   AS ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories

    1.33   ISO 9000 series Quality management and quality assurance standards

    1.34   AS 2243 Safety in laboratories

1.35  AS 2830 Good laboratory practice

- Codes of Practice, such as GLP and GMP

- material safety data sheets (MSDSs)

- National Measurement Act

- standard operating procedures (SOPs)

- quality manuals, equipment and procedure manuals

- enterprise and reporting procedures

- production and laboratory schedules

- material, production, product and solution specifications

- waste minimisation and safe disposal procedures.

Solutions may include but are not limited to:

- solutions of strong/weak acids and bases

- oxidising/reducing agents

- solutions used for complexometric or precipitation titrations

- stains for cells and tissues, enzymes, buffers and antibodies

- diluents for maintaining isotonicity

- organic solutions and histological fixatives.

Apparatus and reagents which may be used to prepare standard solutions include:

- balances

- pipettes, burettes, volumetric glassware, weighing bottles

- dessicators, filtering media

- ovens, muffle furnaces

- solutions, indicators, primary and secondary standards

- auto titrators, pH meters and other related meters and electrodes for determining equivalence points, top pan and analytical balances

- magnetic stirrers and heaters, water baths.

Checking useability of solutions could include:

- examining stained samples for correct staining reactions

- performing pH checks

- confirming enzyme activity

- checking red cell suspensions for haemolysis.

Hazards may include:

- chemicals, such as strong acids and bases, stains

- sharps, broken glassware

- burners, hot plates, ovens, furnaces.

Safe work practices may include:

- use of material safety data sheets (MSDSs)

- use of personal protective equipment, such as gloves, safety glasses, goggles, faceguards, coveralls, gown

- use of biohazard containers, laminar flow cabinets, fumehoods

- correct labelling of reagents and hazardous materials

- handling and storing hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, enterprise procedures and regulations

- regular cleaning and/or decontaminating of equipment and work areas.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potential hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, the assessor should look to see that the candidate can:

- use balances and volumetric glassware appropriately

- select and use primary and secondary standards appropriately

- select and use indicators appropriately

- select and care for electrodes appropriately

- perform QA checks for solution performance (for example, enzyme activity, ferric chloride for phenolic solutions, isotonicity for saline)

- perform titrations using laboratory procedures with required accuracy and precision and within required timelines

- calculate the concentration of the solution given the chemical reaction for the titration

- recognise control results that are not within acceptable range

- record results to enterprise standards

- label and store solutions in accordance with enterprise procedures

- interpret and follow enterprise standard operating procedures (SOPs)

- interpret and use safety information, such as that provided by material safety data sheets (MSDSs) and follow relevant safety procedures.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- solution terminology, chemistry of acids, bases, buffers, redox reactions and complexometric reactions

- grades of glassware, reagents and their use

- reactions used for standardisation and desirable characteristics

- determination of equivalence points using indicators and graphical methods

- calculation methods, including appropriate units, uncertainties and balancing equations

- enterprise communication and reporting procedures

- OHS procedures, including those for using corrosive materials

- relevant health, safety and environment requirements.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- inspection and/or testing of solutions prepared by the candidate

- review of records and workplace documentation completed by candidate

- review of work outputs by the candidate over time to ensure accuracy, consistency and timeliness

- feedback from peers and supervisors

- observation of the candidate preparing, standardising and using a range of solutions

- oral or written questioning.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

### Interdependent assessment of unit

This unit of competency may be assessed with:

- *PMLTEST400* and *PMLTEST500* series units dealing with sampling, tests and measurements.

## Resource implications

Resources may include:

- standard laboratory equipped with appropriate volumetric equipment

- laboratory reagents and equipment

- standard operating procedures (SOPs) and testing methods.

## This competency in practice

### Manufacturing

A standard solution is used to determine the concentration of unknown solutions. The quality of these analyses is critically related to the accuracy with which the concentration of the standard solution is known. Therefore, laboratory technicians spend considerable effort to ensure that the materials and methods used for the preparation and standardisation will lead to a solution of accurately known concentration. For example, anhydrous sodium carbonate is often used to prepare solutions to determine the concentrations of acids. The sodium carbonate is heated at a suitable temperature to remove any trace of moisture and cooled in a dessicator. An appropriate quantity is dissolved in distilled water and made up to volume in a volumetric flask. This solution of known concentration is then titrated with acids of unknown concentration and the concentration of the acids determined.

### Biotechnology

A technical officer arrived at work on Monday morning and discovered that the freezer had been turned off over the weekend and the restriction nucleases had thawed. These enzymes were to be used that morning. The technician needed to check the enzyme activity to determine whether the enzymes had been denatured by the rise in temperature. The technician quickly set up a digestion mix of affected enzyme with some viral DNA of known sequence. The digest produced DNA fragments of expected length, showing the enzyme still had activity. The technician reported the incident along with the results to the supervisor, who decided that the enzymes could be used for that day.

**Environmental**

A laboratory technician was required to determine the total acidity of a water sample as part of a quality control program. The total acidity was measured by titrating the water sample with sodium hydroxide of known concentration using an appropriate indicator. The concentration of the sodium hydroxide was determined via a volumetric titration against a primary standard of potassium hydrogen phthalate.

The value of the total acidity was determined by multiplying the volume of sodium hydroxide used with a numerical 'factor' which had been determined by the laboratory supervisor in order to save time. The value of the 'factor' was displayed on the titration equipment. However, a new technical assistant did the full calculation and found that his/her result differed slightly from that obtained using the 'factor'. After discussion with the laboratory supervisor it was agreed that the error was in the 'factor' and the assumption that each new batch of sodium hydroxide prepared was exactly the same concentration as all previous batches. This was incorrect as the concentration of each batch differed slightly and its actual concentration was determined accurate, using the primary standard. The procedure was changed so that the full calculation was required for all tests.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
| --- | --- | --- | --- | --- | --- | --- |
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

# PMLTEST403B Assist with geotechnical site investigations

## Unit Descriptor

This unit of competence covers the ability to assist with geotechnical site investigations. This competency is typically performed by laboratory technicians working under the guidance of a geotechnical (para)-professional or engineer.

This unit of competency has no prerequisites.

This unit of competency is applicable to laboratory technicians working in the construction, mining and drilling industry sectors.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1. Prepare for on-site operations | 1.1 Identify the job, location, appropriate procedures and safety requirements |
| | 1.2 Identify site hazards and use appropriate personal protective equipment and safety procedures as specified for job and materials to be used |
| | 1.3 Record description of the job to be undertaken, compare with specification and report any variations |
| | 1.4 Select and prepare tools, equipment and materials in accordance with job requirements |
| | 1.5 Select suitable transport for site access |
| | 1.6 Ensure site access requirements, such as entry permits and safety inductions have been organised |
| 2. Assist with excavation of boreholes, test pits and/or trenches | 2.1 Identify the sampling/testing location |
| | 2.2 Excavate or supervise excavation to the sampling/ testing depth, minimising disturbance and potential contamination of the site |
| | 2.3 Identify materials and record changes of strata, test results, and other relevant information |
| | 2.4 Ensure materials from different strata are kept separate |
| | 2.5 Terminate the excavation at the appropriate depth, recording the reason for termination |
| | 2.6 Clean up on completion, backfilling or sealing the |

|   |   |   | excavation or ensuring that it is left in a safe and uncontaminated condition |
|---|---|---|---|
| 3. | Assist with sampling | 3.1 | Prepare sampling equipment and materials |
|   |   | 3.2 | Take disturbed and undisturbed samples in accordance with established practices |
|   |   | 3.3 | Label samples and record details in accordance with established practices |
|   |   | 3.4 | Handle and transport samples in accordance with established practices |
|   |   | 3.5 | Clean and maintain sampling equipment, avoiding environmental damage, including stormwater contamination |
| 4. | Assist with testing | 4.1 | Prepare test equipment and materials |
|   |   | 4.2 | Perform or assist in performing tests in accordance with established practices |
|   |   | 4.3 | Record test data in accordance with established practices |
|   |   | 4.4 | Clean and maintain testing equipment, avoiding environmental damage, including stormwater contamination |
| 5. | Maintain records | 5.1 | Record data in accordance with established practices |
|   |   | 5.2 | Maintain equipment records in accordance with established practices |
|   |   | 5.3 | Maintain confidentiality of enterprise information. |

# RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

This unit of competence describes the work conducted by laboratory operators or technicians conducting sampling and testing at construction, mining or drilling sites.

Operations are performed in accordance with laboratory and/or enterprise procedures, and appropriate legislative requirements. These procedures and requirements may include or have been prepared from:

- industry Codes of Practice

- environmental legislation and regulations

- standard operating procedures (SOPs)

- equipment manuals

- equipment start-up, operation and shutdown procedures

- calibration and maintenance schedules

- quality manuals

- enterprise recording and reporting procedures

- production and laboratory schedules

- material, production and product specifications.

Site hazards may include:

- solar radiation, dust and noise

- manual handling of heavy materials and equipment

- working in/on trenches, confined spaces, wet and uneven surfaces, heights, slopes

- vehicular and pedestrian traffic.

Safety procedures may include:

- location of site services before investigations commence

- use of material safety data sheets (MSDSs)

- use of personal protective equipment, such as hard hat, hearing protection, sunscreen, gloves, masks, goggles, coveralls, safety boots

- handling, and storage of (hazardous) materials and equipment in accordance with labels, MSDS, manufacturer's instructions, enterprise procedures and regulations

- regular cleaning of equipment and vehicles

- machinery guards

- signage, barriers, flashing lights, traffic control.

Tools and equipment may include:

- hand tools, including shovels, crowbars, scoops, spanners, wrenches, tape measure

- consumables, including sample bags, labels, sample tubes, wax

- documentation, including maps, plans, worksheets

- field test equipment, including DCP, SPT, shear vane, pocket penetrometer, water level indicator

- safety clothing and equipment, including helmet, boots, gloves, earmuffs, glasses

- excavation equipment, including hand and power augers.

Typical skills may include:

- working safely with equipment and around earthmoving plant

- driving safely on- and off-road

- working safely in field conditions

- setting up and maintaining tools and equipment

- using tools and equipment to perform basic sampling techniques

- using tools and equipment to perform basic in-situ testing techniques

- cleaning equipment before leaving site in compliance with environmental authority requirements

- reading site plans and operating GPS equipment to locate sampling positions

- identification of soil, rock and fill materials

- observing and recording information on testing and sampling

- making basic measurements of plan location and depth

- handling and storing samples appropriately.

Typical problems include:

- caving of the excavation

- drilling difficulties

- not knowing the requirements of the design engineer

- not understanding the nature of the item being designed (for example, retaining wall, piled structure, earthworks)

- sample loss during retrieval

- knowing when to stop a hole, or what and when to test and sample

- misidentification of samples and sampling locations

- equipment breakdown and breakage

- environmental problems and issues, including site access, inclement weather, traffic, wildlife, vegetation, construction activities.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potential hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

### Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

- identifies and locates site services, sampling and testing sites

- identifies problems in siting (for example, services) immediately

- takes representative samples

- identifies and describes materials accurately

- handles and transports samples correctly

- records sampling and testing information

- uses tools and equipment effectively and efficiently

- observes, interprets and reports on the geotechnical conditions

- communicates problems to appropriate personnel

- records and communicates work results

- works safely.

### Underpinning knowledge

Competency includes the ability to apply and explain:

- the basic concepts, purposes and principles of geotechnical site investigation

- identification and classification of materials

- engineering properties of soil and rock materials

- representative sampling and testing

- map and drawing interpretation

- uses of soil and rock materials in engineering and construction

- in-situ testing methods

- relevant health, safety and environment requirements.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

It is strongly recommended that assessment is conducted through observation over time. The timeframe must allow for adequate assessment of operation under all normal and a range of abnormal conditions. Where this is not practical, additional assessment techniques must be used.

The following assessment methods are suggested:

- review of work outputs over a period of time to ensure accurate and consistent work is obtained within required timelines

- examples of completed workplace documentation

- feedback from peers and supervisors

- oral or written questioning.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

**Interdependent assessment of unit**

This unit of competency may be assessed with:

- PMLSAMP302A Handle and transport samples or equipment

- PMLSAMP400B Obtain representative samples in accordance with a sampling plan

- PMLTEST300B Perform basic tests.

## Resource implications

Resources may include:

- access to sites, tools, equipment

- enterprise procedures, sampling plans, test methods and equipment manuals.

## This competency in practice

Construction materials

A geotechnical consultancy company is carrying out the investigation for the construction of an industrial complex involving building pads and roadways. A contract drilling company has been hired to carry out auger drilling for the building pad foundations. The drill rig will be used to perform standard penetration tests in some boreholes to determine bearing capacities. Undisturbed sample tubes will be pushed to obtain samples for consolidation testing in the laboratory.

A senior technician is in charge of site activities, and arranges for a drill rig. She/he plans a program of drilling, sampling and testing. A laboratory assistant is allocated to carry out the majority of site activities. These include overseeing drilling, testing and sampling operations. He/she is provided with a marked-up plan of the site showing borehole locations so that he/she can direct where to drill. The senior technician makes site visits every second day to oversee the work.

The drilling contractor operates the drill rig, takes tube samples, performs the standard penetration tests and cases the hole if required, as directed by the senior technician. The assistant records and samples the soil profile, seals the sample tubes with wax and labels them. He/she also records the SPT readings and bags and labels the material from the split-spoon sampler. Each borehole is capped to prevent access by unauthorised persons so that the assistant can record standing water level 24 hours after the hole has been drilled. He/she wears a helmet, work boots and earmuffs while working near the rig. He/she covers up and wears sunscreen while working in the sun and drinks large quantities of water.

The assistant also excavates hand auger holes to a depth of one metre at regular intervals in the proposed roadways to obtain samples for California Bearing Ratio tests. Adjacent to each, he/she performs a dynamic cone penetrometer test to two metres to assess the in-situ material. He/she records the logs of the auger holes and the test results on the company's standard data sheets and backfills each auger hole immediately after sampling.

He/she reports each day's activities to the senior technician using the company's standard summary form. He/she is confident to identify soil types thus minimising the need for laboratory testing of the samples taken. Based on the field logs, cross-sections of the site can be drawn so that the designer can assess its geotechnical characteristics and determine the extent of any further investigations.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 | Level 2 |

# PMLTEST404A Perform chemical tests and procedures

## Unit Descriptor

This unit of competency covers the ability to interpret chemical test requirements, prepare samples, conduct pre-use and calibration checks on equipment and perform routine chemical tests/procedures. These tests will involve several measurement steps. The unit includes data processing and interpretation of results and tracking of obvious test malfunctions where the procedure is standardised. However, personnel are not required to analyse data, optimise tests/procedures for specific samples or troubleshoot equipment problems where the solution is not apparent.

This unit of competency is based on, and is equivalent to, the unit *PMLTEST401A Perform instrumental tests/procedures.*

This unit of competency has no prerequisites.

This unit of competency is applicable to laboratory or technical assistants and instrument operators in all industry sectors.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS<br>Elements describe the essential outcomes of a unit of competency. | | PERFORMANCE CRITERIA<br>Performance Criteria describe the level of performance required to demonstrate achievement of the element. | |
|---|---|---|---|
| 1. | Interpret and schedule test requirements | 1.1 | Review test request to identify samples to be tested, test method and equipment/instruments involved |
| | | 1.2 | Identify hazards and enterprise control measures associated with the sample, preparation/test methods, reagents and/or equipment |
| | | 1.3 | Plan work sequences to optimise throughput of multiple samples (if appropriate) |
| 2. | Receive and prepare samples | 2.1 | Log samples using standard operating procedure |
| | | 2.2 | Record sample description, compare with specification and note and report discrepancies |
| | | 2.3 | Prepare samples and standards in accordance with chemical testing requirements |
| | | 2.4 | Ensure traceability of samples from receipt to reporting of results |
| 3. | Check equipment before use | 3.1 | Set up equipment/instruments in accordance with test method requirements |
| | | 3.2 | Perform pre-use and safety checks in accordance with relevant enterprise and operating procedures |
| | | 3.3 | Identify faulty or unsafe components and equipment |

|   |   |   |   |
|---|---|-----|---|
| | | | and report to appropriate personnel |
| | | 3.4 | Check equipment calibration using specified standards and procedures (if applicable) |
| | | 3.5 | Quarantine out-of-calibration equipment/instruments |
| | | 3.6 | Ensure reagents required for the test are available and meet quality requirements |
| 4. | Test samples to determine chemical species or properties | 4.1 | Operate equipment/instruments in accordance with test method requirements |
| | | 4.2 | Perform tests/procedures on all samples and standards (if appropriate) in accordance with specified methods |
| | | 4.3 | Shut down equipment/instruments in accordance with operating procedures |
| 5. | Process and interpret data | 5.1 | Record test data noting atypical observations |
| | | 5.2 | Construct calibration graphs (if appropriate) and compute results for all samples from these graphs |
| | | 5.3 | Ensure calculated values are consistent with expectations |
| | | 5.4 | Record and report results in accordance with enterprise procedures |
| | | 5.5 | Interpret trends in data and/or results and report 'out-of-specification' or atypical results promptly to appropriate personnel |
| | | 5.6 | Determine if obvious procedure or equipment problems have led to atypical data or results |
| 6. | Maintain a safe work environment | 6.1 | Use established safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel |
| | | 6.2 | Minimise the generation of wastes and environmental impacts |
| | | 6.3 | Ensure the safe collection of laboratory and hazardous waste for subsequent disposal |
| | | 6.4 | Care for and store equipment and reagents as required |
| 7. | Maintain laboratory records | 7.1 | Enter approved data into laboratory information management system |
| | | 7.2 | Maintain confidentiality and security of enterprise information and laboratory data |
| | | 7.3 | Maintain equipment and calibration logs in accordance with enterprise procedures. |

# RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements. These procedures include or have been prepared from:

- Australian and international standards, such as:

    1.36   AS ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories

    1.37   ISO 9000 series Quality management and quality assurance standards

    1.38   AS 2243.2 Safety in Laboratories — Chemical aspects

    1.39   AS 2830.1 Good laboratory practice — Chemical analysis

    1.40   AS 2162.1 General — Volumetric glassware

    1.41   AS 2134.1 Flame atomic absorption spectrometry

    1.42   AS 3753 Recommended practice for chemical analysis by ultraviolet/visible spectrophotometry

- industry methods, such as RACI and/or AACC methods for inorganic constituents

- Codes of Practice (such as GLP and GMP)

- National Measurement Act

- material safety data sheets (MSDSs)

- standard operating procedures (SOPs)

- quality manuals and equipment and procedure manuals

- equipment startup, operation and shutdown procedures

- calibration and maintenance schedules

- data quality procedures

- enterprise recording and reporting procedures

- production and laboratory schedules

- material, production and product specifications.

Preparation of samples may include processes, such as grinding, mulling, preparation of discs, digestion, dissolving, ashing, refluxing, extracting, filtration, evaporation, flocculation, precipitation, washing, drying and centrifugation.

Non instrumental test/procedures may include:

- gravimetric analysis, such as:

- loss on drying

- suspended solids

- ashes, such as sulphated and gravimetric assays (for example, sulphates and nitrogen in fertilisers)

- Ni by dimethylglyoxime

- bitumen content of asphaltic concrete

- titrimetric analysis, such as:

    1.43   acid/base determinations

- complexiometric, such as water hardness, Fe by dichromate, binder content analysis

- redox, such as precipitation of chlorides in water

- dissolved oxygen (DO), chemical oxygen demand (COD), biochemical oxygen demand (BOD)

- filtration, separation, solvent extraction techniques

- corrosion testing, cement content, accelerated weathering.

Instrumental tests may include spectrometric, chromatography and electrochemical methods.

Types of instrumentation and instrumental techniques may include:

- colorimetric, such as enzyme activity, chlorine in water, specific cations and anions

- infrared, ultraviolet and visible spectrophotometry

- other spectrometric techniques, such as:

    1.44   fluorimetric analysis, flame atomic emission, flame atomic absorption spectrometry

    1.45   fourier transform infrared

- chromatographic techniques, such as:

    1.46   column and thin layer analytical and preparative chromatography

    1.47   paper, gas, liquid chromatography and HPLC for purity, raw material and formulation checks

    1.48   ion chromatography for detection of nitrates, phosphates, sulphates, chlorides, bromides

    1.49   gel filtration chromatography for purification of proteins

    1.50   affinity chromatography for purification of immunoglobulins

- electrochemical techniques, such as: pH, eH, conductivity, ion selective electrodes

- electrophoretic techniques for DNA patterns and determination of protein purity

- soil testing, such as:

    1.51   moisture content

1.52   organic matter content

1.53   specific anions and cations

- autoanalysers for determination of total P, total Kjeldahl N, orthophosphate, nitrite/nitrate, ammonia.

Chemical tests may include methods for:

- control of starting materials, in-process materials and finished products

- environmental monitoring

- basic troubleshooting and/or problem solving within the scope of standard operating procedures (SOP) and enterprise processes.

Hazards may include:

- chemicals, such as:

1.54   acids, for example, sulphuric, perchloric, hydrofluoric

1.55   heavy metals, pesticides

1.56   anions, for example, fluoride

1.57   hydrocarbons, for example, mono-aromatics

1.58   aerosols from broken centrifuge tubes, pipetting

- sharps, broken glassware

- flammable liquids and gases

- cryogenics, such as dry ice and liquid nitrogen

- fluids under pressure, such as hydrogen in gas liquid chromatography, acetylene in atomic absorption spectrometry

- sources of ignition

- high-temperature ashing processes

- disturbance or interruption of services.

Hazard control measures may include:

- ensuring access to service shut-off points

- recognising and observing hazard warnings and safety signs

- labelling of samples, reagents, aliquoted samples and hazardous materials

- handling and storage of hazardous materials and equipment in accordance with labelling, materials safety data sheets and manufacturer's instructions

- identifying and reporting operating problems or equipment malfunctions

- cleaning and decontaminating equipment and work areas regularly using enterprise procedures

- using personal protective clothing and equipment, such as gloves, safety glasses, coveralls

- using containment facilities (PCII, PCIII and PCIV physical containment laboratories), containment equipment (biohazard containers, laminar flow cabinets, Class I, II and III biohazard cabinets) and containment procedures

- reporting abnormal emissions, discharges and airborne contaminants, such as noise, light, solids, liquids, water/waste water, gases, smoke, vapour, fumes, odour and particulates to appropriate personnel.

Records may include:

- test and calibration results

- equipment use, maintenance and servicing history

- faulty or unsafe equipment.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potential hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

- interprets test methods/procedures accurately

- prepares and tests samples using procedures appropriate to the nature of sample

- performs calibration checks (if required)

- safely operates test equipment/instruments to enterprise standards and/or manufacturer's specification

- prepares calibration graphs and calculates results using appropriate units and precision

- applies basic theoretical knowledge to interpret gross features of data and makes relevant conclusions

- identifies atypical results as out of normal range or an artefact

- traces and sources obvious causes of an artefact

- communicates problem(s) to a supervisor or outside service technician

- records and communicates results in accordance with enterprise procedures

- maintains security, integrity, traceability of samples, sub-samples, test data and results and documentation.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- chemical principles and concepts underpinning test/procedure, such as:

- ions, atoms, molecules, bonding and links to chemical properties

- chemical reactions involving acid/base, redox, complex ion formation, solubility and equilibrium

- energy levels, absorption/emission spectra

- use of instruments for qualitative and/or quantitative analysis

- purpose of the test(s)

- metrology and/or separation techniques underpinning test/procedure

- principles and concepts related to equipment/instrument operation and testing

- function of key components of the equipment/instrument and/or reagents

- effects of modifying equipment/instrument variables

- sample preparation procedures

- reagent maintenance and evaluation procedures

- basic equipment/method troubleshooting procedures

- use of calibration procedures

- calculation steps to give results in appropriate units and precision

- enterprise and/or legal traceability requirements

- relevant health, safety and environment requirements.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- review of test data/results obtained by the candidate over a period of time to check accuracy, consistency and timeliness of results

- review of test records and workplace documentation completed by the candidate

- observation of candidate conducting a range of chemical tests and procedures and sample preparation

- feedback from peers and supervisors

- oral or written questioning of chemical principles and concepts, test methods and enterprise procedures.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

### Interdependent assessment of unit

This unit of competency may be assessed with:

- PMLDATA400A Process and interpret data

- PMLTEST402B Prepare, standardise and use solutions.

## Resource implications

Resources may include:

- standard laboratory equipped with appropriate test equipment/instruments, standards and reagents

- enterprise procedures and standard methods.

## This competency in practice

### Manufacturing

Ultraviolet spectroscopy is a suitable method for determining the concentration of sulphanilamide in pharmaceutical preparations. The ultraviolet absorption spectrum is pH dependent, with the wavelength maximum different in acid and alkaline solutions. Example: a technician was conducting an analysis and noted that the wavelength maxima had moved from approximately 250nm to below 230nm. After reviewing the procedure being used and checking for possible errors, the technician found that an incorrect solvent had been used for the analysis. The hydrochloric acid solvent was replaced with sodium hydroxide, as per the standard method, and the correct absorption spectrum was obtained.

### Environmental

A technician was asked to test water samples from a local lake over several days to determine the lake's nutrient levels following reports of algal blooms in the lake over the preceding weeks. He/she used a field colorimeter kit to determine both nitrates and orthophosphates using standard operating procedures (SOPs). Because the same colorimetric cells were used for the nitrate and orthophosphate tests, they were carefully washed and

rinsed with distilled water between all tests (as specified in the SOP). After reviewing the results from the first three days, the technician noted that the first orthophosphate result, which was done immediately after all the nitrate tests, was much higher than subsequent orthophosphate tests which were all consistently low. The technician argued that the 'high' results for the first orthophosphate test may be due to cross contamination from trace amounts of reagents used in previous nitrate tests despite having closely followed the cleaning/rinsing SOPs. After discussion with his/her supervisor, the technician modified the field procedures by using totally different colorimetric cells for the nitrate and orthophosphate tests. For all subsequent tests no 'high' orthophosphate results were obtained for the first sample. As a result, the laboratory supervisor amended the SOPs to incorporate this new requirement.

### Food processing

Regular checks are conducted on the percentage of salt in cheese at a dairy company's laboratory. A technician checks the results from the airomatic salt-titration equipment and, if the results are abnormal, notifies the supervisor before taking appropriate action. After obtaining a high result, for example, the assistant notified the supervisor and then began checking the machine to identify a possible reason for the high reading. He/she found that the supply bottle of silver nitrate used in the test was almost empty. This had resulted in less solution being pumped through the equipment than required, leading to graph readings that indicated a high percentage of salt. After replacing the silver nitrate bottle and recalibrating the equipment, the assistant retested the cheese samples and found that they contained the expected 1—2% salt.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 1 | Level 2 | Level 1 | Level 2 | Level 2 | Level 2 |

## PMLTEST406A Perform physical tests

## Unit Descriptor

This unit of competency covers the ability to interpret physical test requirements, prepare samples, conduct pre-use and calibration checks on equipment and perform routine physical tests. These tests will involve several measurement steps. The unit includes data processing and interpretation of results and tracking of obvious test malfunctions where the procedure is standardised. However, personnel are not required to analyse data, optimise tests/procedures for specific samples or troubleshoot equipment problems where the solution is not apparent.

This unit of competency is based on, and is equivalent to, the unit *PMLTEST402A Perform non instrumental tests/procedures*.

This unit of competency has no prerequisites.

This unit of competency is applicable to laboratory or technical assistants and instrument operators working in the manufacturing, environment, food and construction materials industry sectors.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1. Interpret and schedule test requirements | 1.1 Review test request to identify samples to be tested, test method and equipment/instruments involved |
| | 1.2 Identify hazards and enterprise control measures associated with the sample, preparation/test methods and/or equipment |
| | 1.3 Plan work sequences to optimise throughput of multiple samples (if appropriate). |
| 2. Receive and prepare samples | 2.1 Log samples using standard operating procedure |
| | 2.2 Record sample description, compare with specification and note and report discrepancies |
| | 2.3 Prepare samples and standards in accordance with physical testing requirements |
| | 2.4 Ensure traceability of samples from receipt to reporting of results |
| 3. Check equipment before use | 3.1 Set up equipment/instruments in accordance with test method requirements |

| | | 3.2 | Perform pre-use and safety checks in accordance with relevant enterprise and operating procedures |
|---|---|---|---|
| | | 3.3 | Identify faulty or unsafe components and equipment and report to appropriate personnel |
| | | 3.4 | Check equipment calibration using specified procedures (if applicable) |
| | | 3.5 | Quarantine out-of-calibration equipment/instruments |
| 4. | Test samples to determine physical properties | 4.1 | Operate equipment/instruments in accordance with test method requirements |
| | | 4.2 | Perform tests/procedures on all samples and standards (if appropriate) in accordance with specified methods |
| | | 4.3 | Shut down equipment/instruments in accordance with operating procedures |
| 5. | Process and interpret data | 5.1 | Record test data noting atypical observations |
| | | 5.2 | Ensure calculated values are consistent with expectations |
| | | 5.3 | Record and report results in accordance with enterprise procedures |
| | | 5.4 | Interpret trends in data and/or results and report 'out-of-specification' or atypical results promptly to appropriate personnel |
| | | 5.5 | Determine if obvious procedure or equipment problems have led to atypical data or results |
| 6. | Maintain a safe work environment | 6.1 | Use established safe work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel |
| | | 6.2 | Minimise the generation of wastes and environmental impacts |
| | | 6.3 | Ensure the safe collection of laboratory and hazardous waste for subsequent disposal |
| | | 6.4 | Care for and store equipment and materials as required |
| 7. | Maintain laboratory records | 7.1 | Enter approved data into laboratory information management system |
| | | 7.2 | Maintain confidentiality and security of enterprise information and laboratory data |

> 7.3 Maintain equipment and calibration logs in accordance with enterprise procedures.

# RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements. These procedures include or have been prepared from:

- Australian and international standards, such as:

    1.59 AS ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories

    1.60 AS 2243.7 Safety in Laboratories — electrical aspects

    1.61 ISO 9000 series Quality management and quality assurance standards

- Codes of Practice (such as GLP and GMP)

- National Measurement Act

- material safety data sheets (MSDSs)

- standard operating procedures (SOPs)

- quality manuals, equipment and procedures manuals

- equipment startup, operation and shutdown procedures

- calibration and maintenance schedules

- data quality procedures

- enterprise recording and reporting procedures

- production and laboratory schedules

- material, production and product specifications.

Preparation of samples may include processes, such as:

- drying, washing, grinding, sieving, melting, moisture conditioning

- cutting, trimming or machining of test specimens, etching.

Physical tests and procedures may include:

- precise measurement of position, orientation and dimensions, such as:

    1.62 3D set up of manufacturing tools using inclinometers, verniers, laser

    1.63 thickness using vernier, X-ray, gamma ray

      1.64   particle size using sieving, laser

- dimensional stability involving expansion, contraction, weathering

- movement using strain gauge, accelerometer

- mass, density and specific gravity, such as:

      1.65   moisture/density relationship

      1.66   compaction

      1.67   loose and compacted density

- thermal tests, such as:

      1.68   thermal conductivity

      1.69   coefficients of expansion (for example, linear, volume)

      1.70   melt flow index

      1.71   calorimetry, (for example, specific heat, latent heat)

      1.72   combustion properties (for example, enthalpy, energy content)

      1.73   drying times

      1.74   thermal stability of products

- optical tests, such as:

      1.75   flatness, surface finish

      1.76   refractive index

      1.77   optical rotation

      1.78   transmission/absorption of filters

      1.79   colour matching of products

- acoustic tests, such as:

      1.80   absorption, reflection, transmission

      1.81   intensity, attenuation, loudness (dB)

      1.82   amplitude, frequency

- electrical tests, such as:

      1.83   conductance, resistance, insulation

      1.84   temperature dependence of dielectrics

- magnetic tests, such as:

      1.85   permeability

      1.86   retentivity, hysteresis loss, coercivity

      1.87   intrinsic induction.

Tests may include methods for:

- control of starting materials, in-process materials and finished products

- investigation of sources of construction materials

- basic troubleshooting of enterprise processes.

Hazards may include:

- microbiological organisms and agents, associated with soil, air, water

- chemicals, such as acids and solvents

- radiation, such as alpha, beta, gamma, X-ray, neutron

- sharps, broken glassware and hand tools

- flammable liquids and gases

- cryogenics, such as dry ice and liquid nitrogen

- fluids under pressure, such as steam, industrial gases

- sources of ignition

- burners, ovens

- disturbance or interruption of services

- crushing, entanglement, cuts associated with moving machinery (grinders).

Hazard control measures may include:

- ensuring access to service shut-off points

- recognising and observing hazard warnings and safety signs

- labelling of samples, and hazardous materials

- handling and storage of hazardous materials and equipment in accordance with labelling, materials safety data sheets and manufacturer's instructions

- identifying and reporting operating problems or equipment malfunctions

- cleaning equipment and work areas regularly using enterprise procedures

- using personal protective clothing and equipment, such as gloves, safety glasses, coveralls, and safety boots

- following established manual handling procedures

- reporting abnormal emissions, discharges and airborne contaminants, such as noise, light, solids, liquids, water/waste water, gases, smoke, vapour, fumes, odour and particulates to appropriate personnel.

Records may include:

- test and calibration results

- equipment use, maintenance and servicing history

- faulty or unsafe equipment.

# Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potential hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

# EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

- interprets test methods/procedures accurately

- prepares and tests samples in accordance with specified methods

- performs calibration checks (if required)

- safely operates test equipment/instruments to enterprise standards and/or manufacturer's specifications

- applies basic knowledge of physical properties of materials to interpret gross features of data and make relevant conclusions

- identifies atypical results, such as 'out of normal' range or an artefact

- traces and sources obvious causes of an artefact

- communicates problem(s) to a supervisor or outside service technician

- records and communicates results in accordance with enterprise procedures

- maintains security, integrity and traceability of samples, sub-samples, test data/results and documentation.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- physical principles and concepts underpinning the test/procedure, such as:

- matter, interatomic and intermolecular forces, states of matter

- mass, weight, forces, pressure, energy

- properties of gases, pressure/volume/temperature, density, diffusion, compressibility

- cohesive/adhesive forces, hydrostatic pressure, fluid flow, viscosity, friction

- thermal expansion, thermal conductivity, coefficients of expansion

- changes of state, energy content, enthalpy change, endothermic and exothermic processes

- electromagnetic spectrum, primary/secondary colours, reflection, refraction diffraction, interference of light

- electrical concepts, including electric field, voltage, current, resistance, AC/DC

- (electro)magnetic concepts, including magnetic field and flux, electromagnetic induction

- sound concepts, including wave properties, amplitude, frequency, loudness dB

- use of instruments for qualitative and/or quantitative analysis

- purpose of test(s)

- metrology techniques underpinning test/procedure

- principles and concepts related to equipment/instrument operation and testing

- function of key components of the equipment/instrument

- effects on test of modifying equipment/instrument variables

- sample preparation procedures

- basic equipment/method troubleshooting procedures

- use of calibration procedures

- calculation steps to give results in appropriate units and precision

- enterprise and/or legal traceability requirements

- relevant health, safety and environment requirements.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- review of test data/results obtained by the candidate over a period of time to check accuracy, consistency and timeliness of results

- review of test records and workplace documentation completed by the candidate

- observation of candidate conducting a range of physical tests and procedures and sample preparation

- feedback from peers and supervisors

- oral or written questioning of physical principles and concepts, test methods and enterprise procedures.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

### Interdependent assessment of unit

This unit of competency may be assessed with:

o      *PMLDATA400A Process and interpret data.*

## Resource implications

Resources may include:

- standard laboratory equipped with appropriate test equipment/instruments, standards and materials

- enterprise procedures and standard methods.

## This competency in practice

### Manufacturing

A technical assistant was measuring the specific density of a shipment of glycerol using a standard laboratory procedure. The result did not agree with the manufacturer's certificate of analysis. The assistant notified the manufacturer who came to the plant and checked the delivered material. It had been raining while the glycerol was in transit and rain water had entered the drum, diluting the glycerol. The drum was returned to the manufacturer and a new drum was supplied to the manufacturing plant. The manufacturer investigated the seals on the glycerol drums and took action to ensure that new seals would protect the product in transit.

### Food processing

A technician was testing the melt flow index of a new type of polymer that was to be used as a sealant for packages of freeze dried coffee. The technician measured the melt flow rate and found it was much too high. The technician then checked the melt flow equipment as per the manufacturer's directions and found the machine was out of calibration. After recalibration using recommended standards, another sample was obtained and retested. This time, the polymer was within specification and was released for use in production.

# Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 1 | Level 2 | Level 1 | Level 2 | Level 2 | Level 2 |

# PMLTEST411A Perform mechanical tests

## Unit Descriptor

This unit of competency covers the ability to interpret mechanical test requirements, prepare samples, conduct pre-use and calibration checks on equipment and perform routine mechanical tests. These tests will involve several measurement steps. The unit includes data processing and interpretation of results and tracking of obvious test malfunctions where the procedure is standardised. However, personnel are not required to analyse data, optimise tests/procedures for specific samples or troubleshoot equipment problems where the solution is not apparent.

This unit of competency has no prerequisites.

This unit of competency is applicable to laboratory or technical assistants and instrument operators working in the manufacturing, food and construction materials industry sectors.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. |
| 1. Interpret and schedule test requirements | 1.1 Review test request to identify samples to be tested, test method and equipment/instruments involved |
| | 1.2 Identify hazards and enterprise control measures associated with the sample, preparation/test methods and/or equipment |
| | 1.3 Plan work sequences to optimise throughput of multiple samples (if appropriate). |
| 2. Receive samples and prepare test-pieces | 2.1 Log samples using standard operating procedure |
| | 2.2 Record sample description, compare with specification and note and report discrepancies |
| | 2.3 Prepare test-pieces (and standards if appropriate) in accordance with mechanical testing requirements |
| | 2.4 Ensure traceability of samples from receipt to reporting of results |
| 3. Check equipment before use | 3.1 Set up equipment/instruments in accordance with test method requirements |
| | 3.2 Perform pre-use and safety checks in accordance with relevant enterprise and operating procedures |

| | | | |
|---|---|---|---|
| | | 3.3 | Identify faulty or unsafe components and equipment and report to appropriate personnel |
| | | 3.4 | Check equipment calibration using specified procedures (if applicable) |
| | | 3.5 | Quarantine out-of-calibration equipment/instruments |
| 4. | Test samples to determine mechanical properties | 4.1 | Operate equipment/instruments in accordance with test method requirements |
| | | 4.2 | Perform tests/procedures on all test-pieces and standards (if appropriate) in accordance with specified methods |
| | | 4.3 | Shut down equipment/instruments in accordance with operating procedures |
| 5. | Process and interpret data | 5.1 | Record test data noting atypical observations |
| | | 5.2 | Ensure calculated values are consistent with expectations |
| | | 5.3 | Record and report results in accordance with enterprise procedures |
| | | 5.4 | Interpret trends in data and/or results and report 'out-of-specification' or atypical results promptly to appropriate personnel |
| | | 5.5 | Determine if obvious procedure or equipment problems have led to atypical data or results |
| 6. | Maintain a safe work environment | 6.1 | Use established work practices and personal protective equipment to ensure personal safety and that of other laboratory personnel |
| | | 6.2 | Minimise the generation of wastes and environmental impacts |
| | | 6.3 | Ensure the safe collection of laboratory and hazardous waste for subsequent disposal |
| | | 6.4 | Care for and store equipment, used test-pieces and back-up samples as required |
| 7. | Maintain laboratory records | 7.1 | Enter approved data into laboratory information management system |
| | | 7.2 | Maintain confidentiality and security of enterprise information and laboratory data |
| | | 7.3 | Maintain equipment and calibration logs in accordance with enterprise procedures. |

# RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements. These procedures include or have been prepared from:

- Australian and international standards, such as:

    1.88  AS ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories

    1.89  AS 2243.6 Safety in Laboratories — Mechanical aspects

    1.90  AS 1012 Methods of testing concrete

    1.91  AS 1289 Methods of testing soils for engineering purposes

    1.92  DIN EN ISO 5269 Pulps — Preparation of laboratory sheets for physical testing

    1.93  ISO 9142 Adhesives

    1.94  ISO 9000 series Quality management and quality assurance standards

- Codes of Practice (such as GLP and GMP)

- National Measurement Act

- material safety data sheets (MSDSs)

- standard operating procedures (SOPs)

- quality manuals, equipment and procedures manuals

- equipment startup, operation and shutdown procedures

- calibration and maintenance schedules

- data quality procedures

- enterprise recording and reporting procedures

- production and laboratory schedules

- material, production and product specifications.

Preparation of samples and test-pieces may include processes, such as cutting, trimming or machining of specimens, etching.

Mechanical tests and procedures may include:

- adhesive strength

- elastic properties and strength of materials

- slip resistance, friction

- viscosity, torque

- creep, endurance

- abrasion, hardness, impact, indent, penetration resistance

- pressure and/or vacuum testing using manometers, load cells.

Tests may include methods for:

- control of starting materials, in-process materials and finished products

- investigation of sources of construction materials

- basic troubleshooting of enterprise processes.

Hazards may include:

- microbiological organisms and agents associated with soil

- chemicals, such as acids and solvents

- sharps and hand tools

- flammable liquids and gases

- cryogenics, such as dry ice and liquid nitrogen

- fluids under pressure, such as steam and industrial gases

- sources of ignition

- disturbance or interruption of services

- crushing, entanglement, cuts associated with moving machinery or falling objects.

Hazard control measures may include:

- ensuring access to service shut-off points

- recognising and observing hazard warnings and safety signs

- labelling of samples and hazardous materials

- handling and storage for hazardous materials and equipment in accordance with labelling, materials safety data sheets and manufacturer's instructions

- identifying and reporting operating problems or equipment malfunctions

- cleaning equipment and work areas regularly using enterprise procedures

- using personal protective clothing and equipment, such as hard hats, hearing protection, gloves, safety glasses, coveralls and safety boots

- following established manual handling procedures

- reporting abnormal emissions, discharges and airborne contaminants, such as noise, light, solids, liquids, water/waste water, gases, smoke, vapour, fumes, odour and particulates to appropriate personnel.

Records may include:

* test and calibration results

* equipment use, maintenance and servicing history

* faulty or unsafe equipment.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potential hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

* interprets test methods/procedures accurately

* prepares and tests samples/test-pieces in accordance with specified methods

* performs calibration checks (if required)

* safely operates test equipment/instruments to enterprise standards and/or manufacturer's specifications

* applies basic knowledge of mechanical properties of materials to interpret gross features of data and make relevant conclusions

* identifies atypical results, such as 'out of normal' range or an artefact

* traces and sources obvious causes of an artefact

* communicates problem(s) to a supervisor or outside service technician

* records and communicates results in accordance with enterprise procedures

* maintains security, integrity and traceability of samples, test-pieces, test data/results and documentation.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- mechanical principles and concepts underpinning the test/procedure, such as:

    1.95   matter, interatomic and intermolecular forces, states of matter

    1.96   mass, weight, forces, pressure, energy

    1.97   cohesive/adhesive forces, friction, slip resistance

    1.98   elasticity, hardness, ductility, malleability, strength of materials, elastic limit, elastic moduli, ultimate stress

- electrical concepts, including electric field, voltage, current, resistance, AC/DC)

- use of instruments for qualitative and/or quantitative analysis

- purpose of test(s)

- metrology techniques underpinning test/procedure

- principles and concepts related to equipment/instrument operation and testing

- function of key components of the equipment/instrument

- effects on test of modifying equipment/instrument variables

- sample preparation procedures

- basic equipment/method troubleshooting procedures

- use of calibration procedures

- calculation steps to give results in appropriate units and precision

- enterprise and/or legal traceability requirements

- relevant health, safety and environment requirements.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- review of test data/results obtained by the candidate over a period of time to check accuracy, consistency and timeliness of results

- review of test records and workplace documentation completed by the candidate

- observation of candidate conducting a range of mechanical tests and sample preparation procedures

- feedback from peers and supervisors

- oral or written questioning of mechanical principles and concepts, test methods and enterprise procedures.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

**Interdependent assessment of unit**

This unit of competency may be assessed with:

o    *PMLDATA400A Process and interpret data.*

# Resource implications

Resources may include:

- standard laboratory equipped with appropriate test equipment/instruments, standards and materials

- enterprise procedures and standard methods.

# This competency in practice

**Construction materials**

A technical assistant is responsible for compressive strength testing of concrete cylinders. Typically, there are 20 to 30 to be tested each day. On arrival in the morning the assistant records the maximum and minimum temperatures of the curing tanks, locates the particular cylinders to be tested and removes them from the tanks. He/she dries each cylinder, weighs it and measures its diameter and length using a comparator gauge. The ends are checked for excessive roughness and non-parallelism. He/she then starts the compression test machine and checks that the load pacer is set to the correct loading rate. He/she places a rubber cap on the finished end of each cylinder in turn and places it centrally on the platen of the load frame. The assistant closes the protective screen, applies load at the specified rate until failure occurs, and records the maximum load. After the cylinder has failed, the assistant removes it from the platen and checks for invalid failure modes. When this occurs (eg. a shear failure) he/she puts the cylinder aside for further investigation. Any debris is removed from the platen and the next cylinder is tested. When all cylinders have been tested, the assistant cleans away any material left on the compression machine and switches it off. He/she enters all the data in into the laboratory information management system (LIMS) which calculates the unit mass and ultimate compressive strength of each cylinder. Finally, the assistant reviews the data for unusual or unexpected results that may indicate an error.

**Manufacturing**

A technician is asked to test a new polymeric material that is to be used to manufacture children's toys. The technician makes several representative test pieces and measures the elastic properties of the polymer as well as the durability of the polymer to flex many times without cracking. Because the polymer is to be used in a toy, the technician also dispatches samples of the polymer for chemical testing by a consulting laboratory to determine whether any toxic monomer could leach out if a child sucked the toy.

# Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 1 | Level 2 | Level 1 | Level 2 | Level 2 | Level 2 |

# PMLTEST511B Supervise earthworks inspection, sampling and testing operations

## Unit Descriptor

This unit of competence covers the ability to supervise and direct earthworks operations based on observation and testing. This competency is typically performed by experienced technicians or para-professionals, who often supervise or direct less experienced technical personnel.

This unit of competency has the following prerequisites:

- PMLTEST403B Assist with geotechnical site investigations, **or**

- PMLSAMP400B Obtain representative samples in accordance with a sampling plan, **and**

- PMLTEST406A Perform physical tests.

This unit of competency is applicable to technical officers working in the construction industry sector.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These can be found at the end of this unit of competency under the section 'This competency in practice'.

| ELEMENTS | PERFORMANCE CRITERIA | |
|---|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance Criteria describe the level of performance required to demonstrate achievement of the element. | |
| 1. Prepare for on-site operations | 1.1 | Identify the job, consult with the client and obtain relevant information, including the level of supervision required, drawings and specifications |
| | 1.2 | Select equipment and materials required for the job |
| | 1.3 | Identify site hazards and the personal protective equipment and safety procedures specified for job |
| | 1.4 | Organise site induction for support personnel as required |
| | 1.5 | Record description of the job to be undertaken, compare with specification and resolve any variations |
| | 1.6 | Select suitable transport for site access |
| | 1.7 | Brief support personnel on job-specific requirements |
| 2. Establish on-site operations | 2.1 | Consult with the site superintendent to determine methods of communication, roles, responsibilities and expectations of each party, including identification of potential problems and conflicts |

| | | 2.2 | Set up facilities for supervision, testing and sample storage |
|---|---|---|---|
| | | 2.3 | Inspect the site to determine the characteristics of the project, including survey control points |
| | | 2.4 | Design inspection, sampling and testing program in accordance with specifications |
| 3. | Supervise earthworks operations | 3.1 | Conduct inspection, sampling and testing in accordance with project requirements |
| | | 3.2 | Direct and advise the site superintendent based on test results and observations |
| | | 3.3 | Record test data and observations in accordance with enterprise practices |
| | | 3.4 | Remit samples to the base laboratory for testing as required |
| | | 3.5 | Ensure cleaning of equipment does not cause environmental damage |
| | | 3.6 | Supervise the removal of equipment and materials from site |
| 4. | Analyse project data and report to client | 4.1 | Analyse project data and report to client |
| | | 4.2 | Report test results to site superintendent at specified frequency |
| 5. | Maintain enterprise records | 5.1 | Record observations, data and results in accordance with enterprise practices |
| | | 5.2 | Maintain security and confidentiality of enterprise information |
| | | 5.3 | Prepare and issue a final project report detailing supervision and testing carried out, statement of compliance and relevant tables and plans as required. |

## RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry Codes of Practice, and/or Australian/international standards, it is expected the latest version will be used.

This unit of competence describes the work conducted by experienced technicians and engineering para-professionals.

Operations are performed in accordance with laboratory and/or enterprise procedures and appropriate legislative requirements. These procedures and requirements include or have been prepared from:

- industry Codes of Practice

- environmental legislation and regulations

- standard operating procedures (SOPs)

- equipment manuals

- equipment start-up, operation and shutdown procedures

- calibration and maintenance schedules

- quality manuals

- enterprise recording and reporting procedures

- production and laboratory schedules

- material, production and product specifications.

Tools and equipment used may include:

- hand and power augers

- hand tools, including shovels, crowbars, scoops, spanners, wrenches, tape measure

- consumables, including sample bags, labels

- documentation, including maps, plans, contract documents, worksheets

- field test equipment, including sand replacement apparatus, nuclear soil moisture/density gauge, dynamic cone penetrometer

- still/video camera

- two-way radio, mobile telephone

- levelling equipment (dumpy, automatic levels).

Site hazards may include:

- solar radiation, dust and noise

- manual handling of heavy materials and equipment

- working in/on trenches, confined spaces, wet and uneven surfaces, heights, slopes

- vehicular and pedestrian traffic.

Safety procedures may include:

- location of site services before investigations commence

- use of material safety data sheets (MSDSs)

- use of personal protective equipment, such as hard hat, hearing protection, sunscreen, gloves, masks, goggles, coveralls, safety boots, high visibility clothing

- handling, and storage of hazardous materials and equipment in accordance with labels, MSDS, manufacturer's instructions, enterprise procedures and regulations

- regular cleaning of equipment and vehicles

- machinery guards

- signage, barriers, flashing lights, traffic control.

Typical skills may include:

- working safely with equipment and around earthmoving plant

- driving safely on- and off-road

- working safely in field conditions

- setting up and maintaining tools and equipment

- using tools and equipment to perform sampling and in-situ testing

- cleaning equipment before leaving site in compliance with environmental authority requirements

- reading site plans, specifications and codes to determine sampling locations and frequencies

- measuring and estimating elevations, lengths, areas and volumes

- identifying of soil and rock materials

- observing and recording project information

- handling and storing samples appropriately

- comparing test results with specifications

- resolving problems without creating confrontational environments

- using computer software to create/maintain databases and produce detailed reports.

Typical problems include:

- uncooperative site personnel

- non-conformances leading to confrontation with other personnel

- delays in obtaining test results

- damage to services, materials and site conditions

- displaced, missing and inaccurate survey markers

- misidentification of samples and sampling locations

- equipment breakdown and breakage

- environmental problems and issues, including site access, inclement weather, traffic, wildlife, vegetation, construction activities.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potentially hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competence must be demonstrated in the ability to perform consistently at the required standard. Candidates must be able to direct earthworks operations, as well as sampling and testing of materials. In particular the assessor should look to see that the candidate:

- reads and interprets maps, drawings, specifications and Codes of Practice

- identifies and locates sampling and testing sites

- measures and estimates elevations, lengths, areas and volumes

- determines sampling and testing frequencies

- takes representative samples

- identifies and describes materials

- records project details in writing, by sketching and photography

- handles and transports samples correctly

- records sampling and testing information

- compares test results with specifications and draws valid conclusions on compliance

- uses tools and equipment effectively and efficiently

- observes, interprets and reports atypical situations

- communicates problems to appropriate personnel

- records and communicates work results

- works safely

- resolves problems constructively.

# Underpinning knowledge

Competency includes the ability to apply and explain:

- engineering properties of soil and rock materials

- techniques used in civil construction

- plant and equipment used in earthworks

- in-situ and laboratory test methods and their application to various materials

- roles and responsibilities for different levels of supervision

- relevant health, safety and environment requirements.

# Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

It is strongly recommended that assessment is conducted through observation over time. The timeframe must allow for adequate assessment of operation under all normal and a range of abnormal conditions. Where this is not practical additional assessment techniques must be used.

The following assessment methods are suggested:

- inspection of workplace documents completed by the candidate

- review of work outputs over a period of time to ensure accuracy, consistency and timeliness

- feedback from peers and supervisors

- use of suitable simulation and/or a range of case studies/scenarios.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

## Interdependent assessment of unit

This unit of competency may be assessed with:

- PMLORG500B Schedule laboratory work for a small team

- PMLCOM500B Provide information to customers

- PMLDATA500B Analyse data and report results.

## Resource implications

Resources may include:

- access to construction sites, tools, equipment and materials

- enterprise procedures, sampling plans, test methods and equipment manuals.

## This competency in practice

### Construction materials

A geotechnical consultancy company has been contracted to provide level one supervision for a commercial development in accordance with *AS3798 — Guidelines on earthworks for commercial and residential developments*. This will involve the construction of roadways, building pads and parking areas for heavy vehicles. A senior technician has been placed in charge of the project with an experienced tester to assist with routine testing and supervision. The principal contractor has provided copies of specifications, drawings and local authority requirements for this type of project. The project will involve clearing and stripping, setting-out (by contract surveyors), cut-to-fill, drainage, sewer lines and other services and construction of roadways and building pads.

The supervision will be carried out in accordance with local authority requirements. Testing will involve measuring in-situ densities of fill (including trench backfill) and road base materials. California Bearing Ratio (CBR) tests will be used as an aid in determining pavement thicknesses. Additional tests will be used to monitor the quality of pavement materials supplied from a local quarry. This will involve both on-site and off-site testing and require liaison with off-site personnel to ensure that the testing is timely and as specified. Based on test results and direct observations, the technician is able to direct and advise the contractor's operators so that the materials are correctly placed and compacted. Test locations are marked on drawings and sketches and photographs used to record details of the project. Detailed daily records are used to prepare monthly reports for the contractor, accompanied by test certificates. Office staff use this information to invoice the client. The technician monitors the project to avoid exceeding the project budget. When the project is finished, the technician prepares a completion report, including all test results, site observations and a scale drawing showing all filled areas and reviews the information as a guide to planning and costing future projects.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing and organising information | Communicating ideas and information | Planning and organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 3 | Level 3 | Level 3 | Level 3 | Level 2 | Level 3 | Level 2 |

# PMLTEST520A Perform complex tests to measure engineering properties of materials

## Unit Descriptor

This unit of competency covers the ability to prepare test specimens and perform multi-stage mechanical tests on them. The unit requires personnel to create test conditions that suit the materials intended use, optimise measurement procedures and recognise critical measurement points during the tests.

The unit also covers data analysis and troubleshooting procedures/equipment that have led to atypical data or results.

This unit of competency has the following prerequisite(s):

> o   *PMLTEST411A Perform mechanical tests.*

This unit of competency is applicable to laboratory personnel in the construction materials industry sector.

Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting, at the end of this unit of competency under the section "This competency in practice".

| ELEMENTS | PERFORMANCE CRITERIA |
|---|---|
| Elements describe the essential outcomes of a unit of competency. | Performance criteria describe the level of performance required to demonstrate achievement of the element. |
| 1.    Interpret and schedule test requirements | 1.1    Review test request and sample documentation to identify required test parameters and intended use of bulk material |
| | 1.2    Identify hazards and enterprise control measures associated with the sample, preparation/testing methods and equipment |
| | 1.3    Inspect sample(s), compare with specifications, record and report discrepancies |
| | 1.4    Liaise with client when samples and/or request forms do not comply with enterprise procedures |
| | 1.5    Match required parameters with suitable test methods, available equipment and instrument specifications |
| | 1.6    Plan parallel work sequences to optimise throughput of multiple sets of samples, as required |

| 2. | Prepare and measure test specimens | 2.1 | Prepare test specimens in accordance with test method |
| | | 2.2 | Conduct preliminary measurements to establish initial dimensions and conditions |
| | | 2.3 | Store test specimens and residual sample materials to maintain their integrity |
| 3. | Check equipment before use | 3.1 | Set up equipment/instruments in accordance with test method |
| | | 3.2 | Perform pre-use and safety checks in accordance with enterprise procedures and manufacturers specifications |
| | | 3.3 | Identify faulty or unsafe components and equipment and report to appropriate personnel |
| | | 3.4 | Check calibration status of equipment and quarantine out of calibration or faulty items |
| 4. | Test samples | 4.1 | Position and secure test specimen in test equipment/instrument |
| | | 4.2 | Conduct preliminary measurements to determine optimum test conditions and instrument settings |
| | | 4.3 | Perform each measurement stage in sequence, terminating each stage at the appropriate end point |
| | | 4.4 | Record all test measurements, observations and factors that may impact on quality of results |
| | | 4.5 | Remove test piece and conduct post-test measurements |
| | | 4.6 | Shut down equipment and store used test pieces in accordance with enterprise procedures |
| 5. | Process and analyse data | 5.1 | Confirm data is the result of valid measurements |
| | | 5.2 | Perform required calculations and ensure results are consistent with estimations and expectations |
| | | 5.3 | Record results with the appropriate accuracy, precision and units |
| | | 5.4 | Analyse trends in data and/or results and report "out of specification" or atypical results promptly to appropriate personnel |
| | | 5.5 | Trouble shoot procedure or equipment problems which have led to atypical data or results |

| 6. | Maintain a safe work environment | 6.1 | Use established safe work practices to ensure personal safety and that of other laboratory personnel |
| | | 6.2 | Minimise the generation of wastes and environmental impact |
| | | 6.3 | Ensure the safe disposal of laboratory wastes |
| | | 6.4 | Clean, care for and store equipment and consumables in accordance with enterprise procedures |
| 7. | Maintain laboratory records | 7.1 | Enter approved data and results into laboratory information management system |
| | | 7.2 | Maintain security and confidentiality of enterprise information and laboratory data |
| | | 7.3 | Maintain equipment and calibration logs in accordance with enterprise procedures. |

## RANGE STATEMENT

The range of variables relates to the unit of competency as a whole. It allows for different work environments and situations that will affect performance.

Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used.

All operations must comply with relevant standards, appropriate procedures and/or enterprise requirements. These procedures include or have been prepared from:

- Australian and international standards such as:

    1.99   AS ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories

    1.100 AS 1289. Methods of testing soils for engineering

    1.101 AS 1012. Methods of testing concrete

    1.102 AS 2981. Methods of sampling and testing asphalt

    1.103 DIN 19683-series Soil testing in agricultural hydrology- Physical laboratory tests

- material safety data sheets (MSDs)

- standard operating procedures (SOPs)

- quality manuals, equipment and procedures manuals

- equipment startup, operation and shutdown procedures

- calibration and maintenance schedules

- enterprise recording and reporting procedures

- production and laboratory schedules

- material, production and product specifications.

Preparation of samples may include:

- moisture conditioning and compaction of soil

- trimming to required size and shape

- orientation of test pieces

- polishing

- curing concrete test pieces.

Tests and procedures could include:

- consolidation of soil (for example, one-dimensional, triaxial)

- shear testing of soil and rock (for example, total stress, effective stress, direct stress, triaxial stress)

- permeability of soil, rock and concrete (for example, falling head, constant head)

- stability and flow of asphalt

- fatigue and creep of metals, polymers and concrete.

Hazards may include:

- microbiological organisms and agents associated with soil

- chemicals such as acids and solvents

- sharps and hand tools

- flammable liquids and gases

- cryogenics such as dry ice and liquid nitrogen

- fluids under pressure such as steam and industrial gases, hydraulics

- disturbance or interruption of services

- crushing, entanglement, cuts associated with moving machinery or falling objects.

Hazard control measures may include:

- ensuring access to service shut off points

- recognising and observing hazard warnings and safety signs

- labelling of samples, hazardous materials and equipment

- machinery guards

- handling and storage for hazardous materials and equipment in accordance with labelling, materials safety data sheets and manufacturer's instructions

- identifying and reporting operating problems or equipment malfunctions

- cleaning equipment and work areas regularly using enterprise procedures

- using personal protective clothing and equipment such as hard hats, hearing protection, gloves, safety glasses, coveralls and safety boots

- following established manual handling procedures

- reporting abnormal emissions, discharges and airborne contaminants such as noise, light, solids, liquids, water/waste water, gases, smoke, vapour, fumes, odour and particulates to appropriate personnel.

## Health, safety and environment

All operations to which this unit applies are subject to stringent health, safety and environmental (HSE) requirements, which may be imposed through State or Federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and HSE requirements, the HSE requirements take precedence.

All operations assume the potential hazardous nature of samples and require standard precautions to be applied. Users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health. All operations are performed in accordance with standard operating procedures.

## EVIDENCE GUIDE

The Evidence Guide describes the underpinning knowledge and skills that must be demonstrated to prove competence.

## Critical aspects of competency

Competency must be demonstrated in the ability to perform consistently at the required standard. In particular, assessors should look to see that the candidate:

- selects test methods, operating parameters and test ranges to suit the material and its intended use

- prepares and orients test pieces precisely

- safely sets up, starts up and shuts down equipment

- maintains close attention to measurement procedures, accuracy and precision during lengthy complex tests

- calculates/determines required engineering properties with appropriate accuracy, precision and units

- recognises atypical data/results and traces artefacts and problems with procedures or equipment

- records and reports data/results in accordance with enterprise procedures

- maintains security, integrity and traceability of all samples, test pieces and documentation.

## Underpinning knowledge

Competency includes the ability to apply and explain:

- principles and concepts underpinning test procedure such as:

- stress, strain, pressure including total and effective stress

- properties of materials

- failure modes of materials

- application of results to engineering design and construction

- sample preparation procedures

- principles and concepts related to equipment/instrument operation and testing

- function of key components of the equipment/instrument

- effects on test of modifying equipment/instrument variables

- basic equipment/method troubleshooting procedures

- use of calibration charts

- calculation steps to give results in appropriate units and precision

- enterprise and/or legal traceability requirements

- relevant health, safety and environment requirements.

## Assessment context and methods

This unit of competency is to be assessed in the workplace or simulated workplace environment.

The following assessment methods are suggested:

- review of results obtained by the candidate over a period of time to ensure accurate and consistent results are obtained within required timelines

- inspection of testing records and workplace documentation completed by the candidate

- observation of candidate conducting a range of complex tests on engineering materials

- feedback from clients, peers and supervisors

- oral or written questioning.

In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.

## Interdependent assessment of unit

This unit of competency may be assessed with:

- o *PMLDATA500B Analyse data and report results.*

# Resource implications

Resources may include:

- engineering materials testing laboratory with appropriate test equipment, instruments and samples, standard operating procedures and test methods.

# This competency in practice

## Construction materials

A consulting company is investigating a possible dam site and needs to assess a particular soil in the foundation. They request a geotechnical testing authority to determine the permeability of the soil. A laboratory technician checks the client request and inspects the soil sample, noting that it is plastic, clay and fissured. The technician checks the dam design parameters and notes the overburden pressure will be 500 kPa.

They decide to use a triaxial permeability test using a constant head configuration. The technician trims a cylindrical test piece, determines the sample's bulk density and uses the trimmings to determine its moisture content. The test piece is mounted in a triaxial test cell and the equipment carefully de-aired. All pressure gauges, regulators and transducers are checked and the equipment is leak tested. A confining stress is applied and after allowing the sample to come to equilibrium, it is back saturated. The cell pressure is increased to 500 kPa and as the sample consolidates, the technician monitors the sample volume change and pore water pressure. A differential pressure is applied in stages and the water flow through the sample is optimised. After reaching a steady state the flow rate is monitored to determine the sample permeability.

After taking sufficient readings to ensure a valid measurement, the technician prepares plots of permeability and time and reports the steady state values. After completing the test, the technician shuts down the equipment in the recommended sequence, cleans and restores all items. He/she removes the test piece and determines the after-test moisture content.

## Key Competencies

The seven key competencies represent generic skills considered for effective work participation. The bracketed numbering against each of the key competencies indicates the performance level required in this unit. These are stand-alone levels and do not correspond to levels in the Australian Qualifications Framework (AQF).

Level (1) represents the competence to undertake tasks effectively

Level (2) represents the competence to manage tasks

Level (3) represents the competence to use concepts for evaluating and reshaping tasks.

| Collecting, analysing & organising information | Communicating ideas & information | Planning & organising activities | Working with others and in teams | Using mathematical ideas and techniques | Solving problems | Using technology |
|---|---|---|---|---|---|---|
| Level 2 | Level 2 | Level 2 | Level | Level 2 | Level 3 | Level 3 |

# PRDSIS07A Capture new data

## Unit descriptor

This unit describes the activities involved in capturing new data by different methods.

| ELEMENT | | PERFORMANCE CRITERIA | |
|---|---|---|---|
| 1 | Prepare for data collection | 1.1 | Key activities and timelines are scheduled with full consideration to the specification and available resources and described according to organisation's requirements |
| | | 1.2 | Administrative and legal requirements for data collection are complied with and recorded |
| | | 1.3 | Relevant personnel are informed about the project |
| | | 1.4 | Designated staff responsibilities are communicated to ensure clarity of understanding of the work and to provide a basis for ongoing assessment |
| 2 | Gather data | 2.1 | Equipment is operated according to manufacturer's specification, statutory and organisation's guidelines |
| | | 2.2 | Entities are related to a reference system based on the specifications |
| | | 2.3 | Data is collected using methodologies detailed in the data collection plan |
| | | 2.4 | Metadata is documented according to accepted industry standards |
| | | 2.5 | Any discrepancies between specification and actual activities are identified and planned for |
| | | 2.6 | OHS requirements are planned for and adhered to throughout the conduct of the project |
| 3 | Finalise the collection process | 3.1 | Attributes and topological structures are added to spatial data according to specifications |
| | | 3.2 | All required documentation is completed according to organisation's requirements |
| | | 3.3 | All data and documentation is stored according to organisation's requirements |
| | | 3.4 | Data integrity is checked in accordance with the validation plan |

## RANGE STATEMENT

**Administrative and legal requirements** may involve title search processes; access protocols and obligations; reimbursements and indigenous considerations; organisational protocols for accessing physical, financial and human resources; copyright; royalty obligations.
**Equipment** may include electronic theodolites, Total Stations, GPS units, levels, PC-based digitising board, vehicles, photogrammetric instruments, data-recording equipment, sonar, tide gauge.
**Manufacturer's specification** may be found in printed instruction, leaflets, operator's manuals, equipment specifications, warranty documents, spatial database, or in computerised format.
**Data capture methodologies** may include direct or indirect, aerial, remote sensing, field, manual entry, conversion or translation from existing information (hard copy or digital.
**Relevant personnel** may include field survey staff, administrative staff, contractors, management, technicians, land owners and land occupiers.
**Entity** may be object or event.
**Reference system** may be local, regional or global coordinate system.
**OHS requirements** may include inspection of work sites, the identification of potential hazards, the development of a site safety plan, the use of safety equipment and/or special clothing, the training of staff in OHS requirements.
**Attributes** are additional descriptors of the entity e.g. size, type.
**Topological structures** describe the relationships between entities.
**Metadata** is summarised information about a data set that describes its characteristics including source, availability, quality, date of acquisition, conditions of use, coordinate system, datum.
**Required documentation** may include records and reports of communication, meeting reports, authority/approval documentation, reimbursements, accident and injury reports.
**Contingencies** may include equipment failure, adverse weather.

## EVIDENCE GUIDE

### Critical aspects

It is essential that competence be demonstrated in relevant data capture and validation methodologies.

### Context of assessment

Evidence may be gathered in a real or simulated environment on or off the job or by examination of a portfolio. Portfolio could include examples of work, client reports or management reports.

### Resources required for assessment include:

- a real or simulated environment

- access to a project specification

- access to equipment and resources for relevant spatial data capture methods

- access to a worksite

- access to spatial data storage system

– organisation policies and guidelines

– relevant legal and statutory documentation

## Interdependent assessment of units

This unit may be assessed concurrently with unit PRDSIS16A Store and retrieve spatial data.

| Underpinning knowledge | Underpinning skills |
|---|---|
| Capture methods | Project management |
| Reference systems and their relationship to each other | Human resource management |
| Precision and accuracy in relation to spatial data acquisition | Proficiency in the operation of spatial data capture equipment |
| Equipment capabilities, limitations and potential problems | Use of marine equipment where appropriate |
| Spatial data formats | |
| Spatial data structure requirements | |
| Spatial data handling | |
| OHS requirements | |
| Organisation policies and guidelines | |
| Relevant Federal, State and local government laws which are applicable to the spatial data capture methodology used | |

## Key competencies

| | |
|---|---|
| Collecting, analysing and organising information | 2 |
| Communicating ideas and information | 2 |
| Planning and organising activities | 3 |
| Working with others and in teams | 2 |
| Solving problems | 3 |
| Using mathematical ideas and techniques | 3 |
| Using technology | 2 |

# PRDSIS08A Obtain and validate existing data

## Unit descriptor

This unit covers obtaining and validating existing spatial data sets.

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 1    Obtain data | 1.1  Data requirements are based on specifications and confirmed with relevant personnel |
| | 1.2  Protocols for communication between spatial data providers and the organisation are followed |
| | 1.3  Sample data is obtained and initial assessment made to determine relevance to project specifications |
| | 1.4  Advice is sought from relevant personnel to assess viability of the provider's service agreement |
| | 1.5  Data is received and processed according to organisation's guidelines |
| 2    Validate data supplied | 2.1  Data is assessed for validity according to specification |
| | 2.2  Omissions and gaps in the spatial data are communicated and followed through to resolution with relevant personnel |
| 3    Complete documentation | 3.1  Metadata is recorded according to accepted industry standards |
| | 3.2  Omissions and gaps in the spatial data are communicated and followed through to resolution with relevant personnel |
| | 3.3  All required documentation is completed promptly and accurately according to organisation's requirements |
| | 3.4  All documentation is stored according to organisation's requirements |

## RANGE STATEMENT

**Spatial data suppliers** may include government or non-government agencies, clearing house, on-line services, specialist companies, internal sources.
**Advice** may include information from management on the financial and/or legal constraints of the organisation, internal or external personnel.
**Relevant personnel** may include lawyer, accountant, management.
**Agreements** may include memorandum of understanding, licence, copyright, royalty, contracts.

**Determining spatial data requirements** may include an independent assessment or a response to a direction regarding scope and needs.
**Organisation guidelines** may include guidelines for working with teams, protocols for accessing internal/external spatial data, information on preferred suppliers, financial constraints, appropriate timelines.
**Initial assessment** is a process to determine suitability of material available on offer.
**Required documentation** may include records and reports of communication, meeting reports, authority/approval documentation, reimbursements.
**Metadata** is summarised information about a data set that describes its characteristics including source, availability, quality, date of acquisition, conditions of use, coordinate system datum.
**Storage** may include hard copy or digital format.

## EVIDENCE GUIDE

### Critical aspects

Demonstrated ability to ensure data is sourced according to agreed processes and protocols and that it satisfies requirements.
Evidence is best gathered through an holistic assessment activity which integrates the elements of competency.

### Context of assessment

Evidence may be gathered in a real or simulated environment on or off the job or by examination of a portfolio. Portfolio could include examples of work, client reports or management reports.

### Resources required for assessment include:

- a real or simulated environment

- access to a project specification

- access to spatial data supply

- access to existing spatial data

- access to relevant personnel as documented in the range statement

- access to spatial data storage system

- organisation policies and guidelines

- relevant legal and statutory documentation

### Interdependent assessment of units

This unit may be assessed concurrently with unit PRDSIS16A Store and retrieve spatial data.

| Underpinning knowledge | Underpinning skills |
|---|---|
| Understanding of reference systems and their relationship to each other | Research |
| | Project management |
| Classification systems, processes and | Interpreting project specifications |

| **Underpinning knowledge** | **Underpinning skills** |
|---|---|

products linked to specification

Knowledge of precision and accuracy in relation to spatial data acquisition

Understanding of spatial data formats

Spatial data structure requirements

Spatial data management practices

A range of capture methodologies

Organisation policies, guidelines and guidelines

Industry standards

**Key competencies**

| | |
|---|---|
| Collecting, analysing and organising information | 2 |
| Communicating ideas and information | 2 |
| Planning and organising activities | 2 |
| Working with others and in teams | 1 |
| Solving problems | 3 |
| Using mathematical ideas and techniques | 3 |
| Using technology | 3 |

# PRDSIS14A Integrate spatial data sets

## Unit descriptor

This unit describes the activities involved in integrating spatial data sets including linking spatial, aspatial and attribute data for the purpose of providing spatially referenced information.

| ELEMENT | PERFORMANCE CRITERIA | |
|---|---|---|
| 1 Confirm task | 1.1 | Client specifications are analysed to determine specific needs and outcomes |
| | 1.2 | Where necessary, requirements for spatial data and constraints are identified through further consultation with supervisor and/or client and outcomes are recorded in accordance with organisation's guidelines |
| 2 Obtain spatial and attribute data | 2.1 | Sources are determined using relevant metadata and consistent with specification |
| | 2.2 | Data is obtained in accordance with organisation's guidelines |
| | 2.3 | Data is checked for integrity and quality |
| | 2.4 | Geographic coverage is assessed for completeness |
| | 2.5 | A metadata set is compiled based on sourced spatial data |
| | 2.6 | Exceptions reports are referred to relevant personnel |
| 3 Create resultant spatial data set | 3.1 | Filtering parameters are established according to scientific accuracy, redundancy, client and organisation's requirements |
| | 3.2 | Spatial data is translated into a format which satisfies specifications |
| | 3.3 | Spatial data sets are populated with edited spatial data according to organisation's requirements |
| | 3.4 | Spatial and attribute data are linked in accordance with specification and industry standards |

| ELEMENT | PERFORMANCE CRITERIA |
|---|---|
| 4     Link spatial and attribute data | 4.1    The intended use and requirements for the linked data are determined |
| | 4.2    The method required for referencing the location of the attribute data is identified |
| | 4.3    The linking of the spatial and attribute data is completed in accordance with the specification |
| | 4.4    Spatial queries are carried out via the spatial data to access the attribute data |
| 5     Test and validate spatial data sets | 5.1    Test queries are determined and implemented to ensure spatial data sets meet specifications |
| | 5.2    Spatial data is checked to ensure correctness of links |
| | 5.3    An exception report is developed according to organisation's guidelines and reported back to relevant personnel |
| | 5.4    All relevant documentation is completed according to organisation requirements |
| | 5.5    Quality and usability are ensured according to organisation's requirements |

## RANGE STATEMENT

**Client specifications** are a description of the outputs and may be a contract, a memorandum, written instructions, tender brief, verbal instructions.

**Constraints** may be due to time, money, resource availability, environmental factors, scale, datum, coverage, legal statutory or industry requirements.

**Metadata** may include information on accuracy, currency, lineage, custodianship.

**Filtering parameters** may include geographic location, attribute range and accuracy.

**Spatial data sets** may be digital, hard copy, image, text or vector, propriety standards.

**Aspatial data** is data without a spatial component.

**Attributes** are additional descriptions of the entity.

**Format** may be digital, hard copy, image, text, vector.

**Test queries** is a model set of questions with known answers.

**Exception report** includes information on non-conforming items that require attention by other functions.

**Relevant documentation** may include final report, correspondence with client, records of conversation, organisation work activity sheets.

## EVIDENCE GUIDE

### Critical aspects

Demonstrated ability to use the project specification to develop the parameters for linking two or more sets of data to create a resultant data set and to measure outcomes against specifications to identify and record correctness and exceptions.

### Context of assessment

Evidence may be gathered in a real or simulated environment on or off the job or by examination of a portfolio. Portfolio could include examples of work, client reports or management reports.

### Resources required for assessment include:

- a real or simulated environment
- client specification
- spatial and attribute data
- organisation policies and guidelines
- relevant legal and statutory documentation

### Consistency in performance

In order to ensure consistency of performance, evidence is to be collected from a range of situations over a period of time.

| Underpinning knowledge | Underpinning skills |
|---|---|
| Understanding of metadata | Research skills in accessing sources of spatial data |
| Understanding of reference systems and their relationship to each other | Spatial data processing |
| Classification systems, processes and products | Error analysis |
| Knowledge of precision and accuracy in relation to spatial information | Computer skills |
| Understanding of the principles of spatial data acquisition (photogrammetry, remote sensing, terrestrial survey, hydrography) | |
| Understanding of spatial data formats | |
| Spatial data structure requirements | |
| Spatial data management practices | |
| Spatial database operation | |
| Spatial data handling | |

| Underpinning knowledge | Underpinning skills |
|---|---|
| Spatial and attribute data set structure | |
| Organisation policies and guidelines | |
| Security management guidelines | |
| OHS | |
| Industry standards | |
| Implementing quality guidelines | |

**Key competencies**

| | |
|---|---|
| Collecting, analysing and organising information | 2 |
| Communicating ideas and information | 2 |
| Planning and organising activities | 2 |
| Working with others and in teams | 2 |
| Solving problems | 2 |
| Using mathematical ideas and techniques | 2 |
| Using technology | 3 |

# PRDSIS29A Collect basic data

## Unit descriptor

This unit describes the activities involved in collecting basic data by different methods under supervision.

| ELEMENT | PERFORMANCE CRITERIA | |
|---|---|---|
| 1  Gather basic data | 1.1 | Equipment is operated according to manufacturer's specification, statutory and organisation's guidelines |
| | 1.2 | Data and attributes are collected using methodologies detailed in the data collection plan |
| | 1.3 | Any discrepancies between specification and actual activities are identified, recorded and reported |
| | 1.4 | Administrative and legal requirements for data collection are complied with and recorded |
| | 1.5 | OHS requirements are adhered to throughout the conduct of the project |
| 2  Finalise the collection process | 2.1 | All required documentation is completed according to organisation's requirements |
| | 2.2 | All data and documentation are stored according to organisation's requirements |

## RANGE STATEMENT

**Administrative and legal requirements** are those contained within the procedural requirements of the organisation.

**Equipment** may include electronic theodolites, Total Stations, GPS units, levels, PC-based digitising board, vehicles, photogrammetric instruments, data-recording equipment.

**Manufacturer's specification** may be found in printed instruction, leaflets, operator's manuals, equipment specifications, warranty documents, spatial database, or in computerised format.

**Data collection** may include direct or indirect, aerial, remote sensing, field, manual entry.

**OHS requirements** include the identification of potential hazards and the use of safety equipment and/or special clothing.

**Attributes** are additional descriptors of the entity e.g. size, type.

**Required documentation** may include records and reports of communication, meeting reports, authority/approval documentation, reimbursements, accident and injury reports.

**Contingencies** may include equipment failure, adverse weather.

# EVIDENCE GUIDE

**Critical Aspects of Evidence to be considered:**

It is essential that competence be demonstrated in relevant data collection and validation methodologies.

**Context of assessment**

Evidence may be gathered in a real or simulated environment on or off the job or by examination of a portfolio. Portfolio could include examples of work, client reports or management reports.

**Resources Implications**

a real or simulated environment

access to a project specification

access to equipment and resources for relevant spatial data collection methods

access to a worksite

access to spatial data storage system

organisation policies and guidelines

relevant legal and statutory documentation

| Underpinning knowledge | Underpinning skills |
| --- | --- |
| Collection methods | Working effectively as part of a team |
| Precision and accuracy in relation to spatial data acquisition | Proficiency in the operation of spatial data collection equipment |
| Equipment capabilities, limitations and potential problems | Use of marine equipment where appropriate |
| Spatial data handling | |
| OHS requirements | |
| Organisation policies and guidelines | |

**Key competencies**

| | |
| --- | --- |
| Collecting, analysing and organising information | 2 |
| Communicating ideas and information | 2 |
| Planning and organising activities | 1 |
| Working with others and in teams | 2 |
| Solving problems | 2 |
| Using mathematical ideas and techniques | 1 |
| Using technology | 2 |