

PM501 **Manage application of project integrative processes**

Unit Descriptor This unit specifies the outcomes required to integrate management of overall project scope in the context of schedules, budgets, risks and contracts towards establishing agreed baselines for supplier/client requirements.

Competency Field *Business management services*

Domain *Project management*

Application of the competency This unit addresses project integration management. This function will cover the management of the project to achieve the project outcome by balancing the other eight functions of project management, and the alignment and tracking of the project objectives to comply with organisational goals, strategy and objectives.

A project manager usually performs this function. The functions performed by a program manager to manage integration within multiple projects are addressed in PM601.

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 of all 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 implemented 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 life cycle
- 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 effect 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.

The project plan may include:

- a single document
- 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
- layout of project personnel and equipment
- personal working conditions
- team dynamics
- identity and differentiation of the project within the larger environment

Levels of management may include:

- corporate/enterprise
- business unit
- program/project
- operations/technical

Finalisation 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

Integration management issues and recommended improvements may include:

- settling of financial liabilities
- finalisation of account codes and other financial documentation
- forwarding finalisation report to senior personnel
- 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 competency in this unit must be able to provide evidence that responsibility was taken 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 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:

- 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
 - focussed on outcomes

Key Competencies or Generic Skills relevant to this unit include:

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 degree of difficulty in this unit.

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|--|--|
| <p>1 Communicating idea and information (3)</p> | <ul style="list-style-type: none"> • communication required to lead a team including negotiation skills and report writing • verbal communication skills including those involved in making presentations, participating in meetings, questioning and discussions |
| <p>2 Collecting, analysing and organising information (2)</p> | <ul style="list-style-type: none"> • tracking and monitoring of project • relevant skills associated with reviewing project |
| <p>3 Planning and organising activities (2)</p> | <ul style="list-style-type: none"> • planning own work and that of project team members |
| <p>4 Working in a team (3)</p> | <ul style="list-style-type: none"> • leading and representing the project team • working with others including external parties/clients and project team members |
| <p>5 Using Mathematical ideas and techniques (1)</p> | <ul style="list-style-type: none"> • calculation skills associated with data manipulation involved in project including financial data |
| <p>6 Solving problems (3)</p> | <ul style="list-style-type: none"> • applying problem solving skills as required • assisting others to solve problems arising within project |
| <p>7 Using technology (2)</p> | <ul style="list-style-type: none"> • using word processing packages, spreadsheets, databases, other packages to produce written correspondence and reports of project activities, financial reporting, data collation • using specific project management software tools |
| <p>Innovation skills (2)</p> | <ul style="list-style-type: none"> • using review process to inform future activity in project management |
| <p>Products that could be used as</p> | <ul style="list-style-type: none"> • documentation produced in managing project such as: |

- evidence include:**
- 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 impact of organisation and other environment 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 is undertaken
 - how team members are managed through the project
 - how project is monitored during the lifecycle of the project
 - how problems arising in project are addressed
 - how project is finalised
 - how projects are reviewed and lessons learnt 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 integration for projects
- Integrated competency assessment:**
- this unit should be assessed with other project management units at AQF level 5, as applicable to candidate's management role in project as part of an integrated assessment activity.

PM502 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.

Competency Field *Business management services*

Domain *Project management*

Application of the competency This unit addresses project scope management.
A project manager usually performs this function. The functions performed by a program manager to manage scope within multiple projects are addressed in PM602.

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.

4. Conduct project authorisation activities

1.1 *Project authorisation* is confirmed with higher authority as the basis for future project management activity and commitment of resources and effort

5. Conduct project scope definition activities

2.1 Project objectives, *deliverables*, constraints and principal work activities are identified, with guidance of higher project authorities, 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* plans are developed and implemented

6. 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 to meet project objectives and according to *change control procedures*

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 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.

Project authorisation may:

- already have been decided before involvement of the project manager
- be required at a number of critical review points during the project
- 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

Project performance may include:

- measurement of time and resources spent on the project, as compared to baseline data
- use of tools and techniques to manage and measure project progress in terms of time and resources

Scope management may include:

- progressive refinement of scope throughout project life cycle
- identifying and reporting scope creep, ie incremental increases to scope that were not part of the original project requirements
- identifying factors which influence changes to scope
- determining that a scope change has occurred or is about to occur
- seeking authorisation for changes to project scope
- implementing agreed scope changes
- 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, eg design, engineering, finance
- project documentation, including plans, schedules, statements, directives, guidelines and instructions
- formal agreements, eg contracts, sub-contracts, memoranda of understanding

Evidence Guide

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

Overview of assessment requirements

A person who demonstrates competency in this unit must be able to provide evidence that responsibility was taken 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
 - organisational processes leading to project authorisation, start-up and designation of project manager
 - the place of scope management in the context of the project life cycle
 - the need for scope definition during project start-up and ongoing during the project life cycle
 - methods to define products and activities, eg work, organisation and product breakdown structures
 - the components of a scope statement
 - the practice of change control

Required skills and attributes include:

- project 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 include:

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 degree of difficulty in this unit.

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| <p>2 Collecting, analysing and organising information (2)</p> | <ul style="list-style-type: none"> • tracking, monitoring and controlling the project • relevant skills associated with reviewing project |
| <p>3 Planning and organising activities (2)</p> | <ul style="list-style-type: none"> • planning own work and that of project team members |
| <p>4 Working in a team (3)</p> | <ul style="list-style-type: none"> • leading and representing the project team • working with others including external parties/clients and project team members |
| <p>5 Using Mathematical ideas and techniques (1)</p> | <ul style="list-style-type: none"> • calculation skills associated with data manipulation involved in project including financial data |
| <p>6 Solving problems (3)</p> | <ul style="list-style-type: none"> • applying problem solving skills as required to address problems arising in managing the project • assisting others to solve problems arising within project |
| <p>7 Using technology (2)</p> | <ul style="list-style-type: none"> • using word processing packages, spreadsheets, databases, other packages to produce written correspondence, plan, scope definition and reports of project activities, financial reporting, data collation • using specific project management software tools |
| <p>Innovation skills (2)</p> | <ul style="list-style-type: none"> • using review process to inform future activity in project management |

Products that could be used as evidence include:

- documentation produced in managing scope of project 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 is gained
- how project scope is defined
- how team members are managed throughout the project with respect to the scope of the project
- how the need for scope changes within the project are identified and implemented
- how project is reviewed with respect to the scope of the project
- how improvements to scope management of projects are 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 scope of projects

Integrated competency assessment:

- this unit should be assessed with other project management units at AQF level 5, as applicable to candidate's management role in project as part of an integrated assessment activity.

PM503 Manage project time

Unit Descriptor This unit specifies the outcomes required to manage project time in relation to activities associated with development, analysis and control of project schedules.

Competency Field *Business management services*

Domain *Project management*

Application of the competency This unit addresses time management within projects. A project manager usually performs this function. The functions performed by a program manager to manage time within multiple projects are addressed in PM603.

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. <i>Italicised</i> terms are elaborated in the Range Statement.
7. Determine project schedule	<p>1.1 The duration and effort, sequence and dependencies of tasks are determined, from the scope definition as the basis for the project schedule</p> <p>1.2 Input to and approval for, project schedules are obtained from stakeholders and higher authorities</p> <p>1.3 Established <i>time management activities</i>, methods, <i>techniques and tools</i> are selected and used to determine preferred schedule, <i>time management plans</i>, resource allocation and financial requirements</p> <p>1.4 Agreement to the schedule is obtained from higher project authority and communicated to stakeholders to provide the basis for measurement of progress</p>
8. Implement project schedule	<p>2.1 Mechanisms are implemented to measure, record and report progress of activities in relation to the agreed schedule and plans</p> <p>2.2 Ongoing analysis of options is conducted to identify variances and forecast the impact of changes on the schedule</p> <p>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</p>

- 2.4 Responses to perceived, potential or actual schedule changes are developed, agreed by higher project authority, and implemented to maintain project objectives
- 9. 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 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.

Time management 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 time management methods, tools and techniques
- be conducted routinely or as changing circumstances dictate
- take into account internal organisational change and external environmental change

Techniques and tools may include:

- use of personal experience and/or subject matter experts,
- conducting or supervising qualitative and/or quantitative time analysis, such as schedule simulation, decision analysis, contingency planning, alternative strategy development
- 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 competency in this unit must be able to provide evidence that responsibility was taken 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
 - the need to link time, cost and resources to the project schedule
 - responsibilities for time management
 - development of project schedules
 - use of the schedule as a control mechanism
 - the place of time management in the context of the project life cycle and other project management functions
 - appropriate time management methodologies, their capabilities, limitations, application and outcomes

Required skills and attributes include:

- 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 include:

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 degree of difficulty in this unit.

- | | |
|---|--|
| 1 Communicating idea and information (3) | <ul style="list-style-type: none"> • communication required to lead a team including negotiation skills and report writing • verbal communication skills including those involved in making presentations, participating in meetings, questioning and discussions |
| 2 Collecting, analysing and organising information (2) | <ul style="list-style-type: none"> • tracking and monitoring of project • relevant skills associated with reviewing project |
| 3 Planning and organising activities (2) | <ul style="list-style-type: none"> • planning own work and that of project team members |
| 4 Working in a team (3) | <ul style="list-style-type: none"> • leading and representing the project team • working with others including external parties/clients and project team members |
| 5 Using Mathematical ideas and techniques (1) | <ul style="list-style-type: none"> • calculation skills associated with data manipulation involved in project including financial data |
| 6 Solving problems (3) | <ul style="list-style-type: none"> • applying problem solving skills as required to address problems arising in managing the project • assisting others to solve problems arising within project |
| 7 Using technology (2) | <ul style="list-style-type: none"> • using word processing packages, spreadsheets, databases, other packages to produce written correspondence and reports of project activities, financial reporting, data collation • using specific project management software tools |
| Innovation skills (2) | <ul style="list-style-type: none"> • using review process to inform future activity in project management |

Products that could be used as evidence include:

- documentation produced in managing project such as:
 - project work breakdown structure
 - key activity schedule
 - application of precedence and dependency principles to task definition
 - project schedule
 - regular schedule reports to stakeholders and higher authority
 - application of monitoring, review and reporting mechanisms
 - application of actual progress against planned progress
 - records of recommendations for, and corrective actions taken against, variances in the project schedule
 - records of lessons learned

Processes that could be used as evidence include:

- how project schedule is determined
- how agreement on schedule is reached with relevant parties
- how team members are managed throughout the project with respect to time management within the project
- how the schedule is managed throughout projects
- how problems and issues with time management of projects are identified and addressed
- how project is reviewed with respect to time management of the project
- how improvements to time management of projects are 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 time and scheduling within projects

Integrated competency assessment:

- this unit should be assessed with other project management units at AQF level 5, as applicable to candidate's management role in project as part of an integrated assessment activity.

PM504**Manage project costs****Unit Descriptor**

This unit specifies the outcomes required to identify, analyse and refine project costs to produce a budget and is used as the principal mechanism to control project cost.

Competency Field

Business management services

Domain

Project management

Application of the competency

This unit addresses cost management within projects. This function will cover the management of the financial aspects of the project.

A project manager usually performs this function. The functions performed by a program manager to manage costs within multiple projects are addressed in PM604.

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.

10. 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
- 2.1 *Cost management* plans are developed and implemented to ensure clarity of understanding and ongoing management of project finances

11. Monitor and control project costs

- 2.2 Agreed *financial management procedures and processes* are implemented to monitor actual expenditure and to control costs
- 2.3 Cost analysis methods and tools are selected and used to identify cost variations, evaluate options and recommend actions to higher project authority
- 2.4 Agreed actions are implemented, monitored and modified to maintain financial and overall project objectives throughout the project life cycle

12. Conduct financial completion activities

- 3.1 Activities are conducted to signify financial completion
- 3.2 Project outcomes are *reviewed* 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 and

Range Statement

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Others may include:

- program manager
- higher project authority
- team members
- project specialists or other personnel.

Cost management 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 time management methods, tools and techniques
- be conducted routinely or as changing circumstances dictate
- take into account internal organisational change and external environmental change

Accuracy of cost estimates may include:

- the stage of the project life cycle
- the availability of information at the time
- contingency to allow for identified risks and uncertainty
- organisational requirements, eg overhead and profit margin

Financial management processes and procedures may include:

- approval processes
- financial authorisations/delegations
- invoice procedures
- communication and reporting

Project reviews may include:

- agreed major milestones, eg phases, sub-contracts
- delivery of major deliverables
- change of key personnel
- finalisation 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 higher authority
- recommended and approved courses of action
- project and/or organisation files and records
- cost management lessons learned

Evidence Guide

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

Overview of assessment requirements

A person who demonstrates competency in this unit must be able to provide evidence that responsibility was taken within projects for cost of the projects. This will include evidence of managing the work of others working 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:

- 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 unit include:

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 degree of difficulty in this unit.

- | | |
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| <p>1 Communicating idea and information (3)</p> | <ul style="list-style-type: none"> • communication required to lead a team including negotiation skills and report writing • verbal communication skills including those involved in making presentations, participating in meetings, questioning and discussions |
| <p>2 Collecting, analysing and organising information (2)</p> | <ul style="list-style-type: none"> • tracking, monitoring and controlling financial aspects of the project • relevant skills associated with reviewing project |
| <p>3 Planning and organising activities (2)</p> | <ul style="list-style-type: none"> • planning own work and that of project team members |
| <p>4 Working in a team (3)</p> | <ul style="list-style-type: none"> • leading and representing the project team • working with others including external parties/clients and project team members |
| <p>5 Using Mathematical ideas and techniques (1)</p> | <ul style="list-style-type: none"> • calculation skills associated with data manipulation involved in project including financial data |
| <p>6 Solving problems (3)</p> | <ul style="list-style-type: none"> • applying problem solving skills as required to address problems arising in managing the project • assisting others to solve problems arising within project |

- 7 Using technology (2)**
- using word processing packages, spreadsheets, databases, other packages to produce written correspondence and reports of project activities, financial reporting, data collation
 - using specific project management software tools
- 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 costs associated with projects such as:
 - cost estimates
 - cost management plans and strategies
 - cost breakdown structures
 - project budgets and expenditure forecasts
 - financial transition plans
 - records of project finalisation activities and disposal of project assets
 - project finalisation reports
 - records of cost management lessons learned
- Processes that could be used as evidence include:**
- how resource requirements and associated costs are determined for projects
 - how cost management plans are developed
 - how team members are managed throughout the project with respect to the costs of the project
 - how problems and issues with respect to costs and arising during projects are identified and addressed
 - how project is reviewed with respect to the costs of the project
 - how improvements to cost management of projects are 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 costs within projects
- Integrated competency assessment:**
- this unit should be assessed with other project management units at AQF level 5, as applicable to candidate's management role in project as part of an integrated assessment activity.

PM505 **Manage project quality**

Unit Descriptor This unit specifies the outcomes required to manage quality within projects, a factor critical to success of the project along with scope, cost and time.

Competency Field *Business management services*

Domain *Project management*

Application of the competency This unit addresses quality management within projects. A project manager usually performs this function. The functions performed by a program manager to manage quality within multiple projects are addressed in PM605.

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.

13. Determine quality requirements

- 1.1 *Quality objectives*, standards and levels are determined, with input from stakeholders and guidance of higher project authorities, to establish the basis for quality outcomes and *quality management plans*
- 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 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 project plans and implemented as basis for performance measurement

14. 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 higher project authority to enable continuous improvement in quality outcomes

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| 2.3 | Inspections of quality processes and <i>quality control</i> 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 higher project authority and stakeholders |
| 15. 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 <i>improvements</i> are identified, documented and passed on to 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.

Quality objectives may include:

- requirements from the client and other stakeholders
- requirements from higher project authority
- negotiated trade-offs between cost, schedule, performance
- quality which may impact upon customer satisfaction

Quality management plans may include:

- established processes
- authorisations and responsibilities for quality
- control
- quality assurance
- continuous improvement

Quality management may include:

- work done independently within broad guidance or by taking the lead of a team
- work involving consultation with other project members, teams and internal stakeholders
- work involving the selection, use and supervision of appropriate quality management methods, tools and techniques
- work conducted routinely or as changing circumstances dictate

- take into account internal organisational change and external environmental change
- Tools may include:*
- chart processes
 - group work activities
 - control charts
 - rank candidates
 - define control
 - limits and/or indicate variation.
 - brainstorming
 - benefit/cost analysis
 - flowcharts
 - benchmarking
 - 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 by less formal processes which enhance both the product quality and processes of the project, eg 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 competency in this unit must be able to provide evidence that responsibility was taken for quality management of projects. This will include evidence of managing the work of others working within the project team, with respect to quality.

Specific evidence requirements

Required knowledge and understanding include:

- broad knowledge and understanding
 - the principles of project quality management and their application
 - acceptance of responsibilities for project quality management
 - use of quality management systems and standards
 - the place of quality management in the context of the project life cycle
 - appropriate project quality management methodologies; their capabilities, limitations, applicability and contribution to project outcomes
- substantiating evidence may be:
 - 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

Required skills and attributes include:

- project management
- quality management
- planning and organising
- communication and negotiation
- problem solving
- leadership and personnel management
- monitoring and review skills
- attributes
 - analytical
 - attention to detail
 - able to maintain an overview
 - communicative
 - positive leadership

Key Competencies or Generic Skills relevant to this unit include:

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 degree of difficulty in this unit.

- | | |
|--|--|
| <p>1 Communicating idea and information (3)</p> | <ul style="list-style-type: none"> • communication required to lead a team including negotiation skills and report writing • verbal communication skills including those involved in making presentations, participating in meetings, questioning and discussions |
| <p>2 Collecting, analysing and organising information (2)</p> | <ul style="list-style-type: none"> • tracking, monitoring and controlling quality of project • relevant skills associated with reviewing project |
| <p>3 Planning and organising activities (2)</p> | <ul style="list-style-type: none"> • planning own work and that of project team members |
| <p>4 Working in a team (3)</p> | <ul style="list-style-type: none"> • leading and representing the project team • working with others including external parties/clients and project team members |
| <p>5 Using Mathematical ideas and techniques (1)</p> | <ul style="list-style-type: none"> • calculation skills associated with data manipulation involved in project including financial data |
| <p>6 Solving problems (3)</p> | <ul style="list-style-type: none"> • applying problem solving skills as required to address problems arising in managing the project • assisting others to solve problems arising within project |
| <p>7 Using technology (2)</p> | <ul style="list-style-type: none"> • using word processing packages, spreadsheets, databases, other packages to produce written correspondence and reports of project activities, financial reporting, data collation • using specific project management software tools |
| <p>Innovation skills (2)</p> | <ul style="list-style-type: none"> • using review process to inform future activity in project management |
| <p>Products that could be used as</p> | <ul style="list-style-type: none"> • documentation produced in managing project such as: |

- evidence include:**
- 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 are determined for projects
 - how quality tools are selected for use in projects
 - how team members are managed throughout the project with respect to quality within the project
 - how quality is managed throughout the project
 - how problems and issues with respect to quality and arising during projects are identified and addressed
 - how project is reviewed with respect to quality management
 - how improvements to quality management of projects are 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 quality within projects
- Integrated competency assessment:**
- this unit should be assessed with other project management units at AQF level 5, as applicable to candidate's management role in project as part of an integrated assessment activity.

PM506 **Manage project human resources**

Unit Descriptor

This unit specifies the outcomes required of project human resource management (HRM). It involves the development of individuals and sub-teams into a cohesive project unit with the common purpose of meeting project objectives.

Competency Field

Business management services

Domain

Project management

Application of the competency

This unit addresses human resource management within projects. A project manager usually performs this function. The functions performed by a program manager to manage human resources within multiple projects are addressed in PM606.

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.

16. Implement human resource and stakeholder planning activities

- 1.1 Resource requirements for individual tasks are determined, with input from stakeholders and guidance from higher project authorities, to determine project staffing levels and required competencies
- 1.2 *Project organisation and structure* designated by 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 by 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 HRM plans to ensure clarity of understanding and ongoing human resource management

17. Implement staff training or development

- 2.1 Designated staff responsibilities, authority and individual performance measurement criteria are communicated 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 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
- 18. 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 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 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 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.

Project organisation and structure may be affected by established organisational responses to external influences such as:

- anti-discrimination
- equal employment opportunity
- affirmative action
- occupational health and safety
- work place bargaining
- accepted work practices

Staff may come from:

- within the organisation
- loan staff from other projects

HRM methods, techniques and tools may include established organisation responses to:

- consultants
- external authorities or specialists, eg auditors, quality assurance
- individual and group competency identification and development
- HRM forecasts, staffing plans and job descriptions
- staff recruitment and reallocation
- performance monitoring, assessment and reporting
- 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 competency in this unit must be able to provide evidence that responsibility was taken within projects for human resource management for the projects. This will include evidence of managing the work of others working within the project team in the area of human resource management.

Specific evidence requirements

Required knowledge and understanding include:

- broad knowledge and understanding of:
 - the importance of HRM in the project management environment
 - established organisational policies, standards and methods required to achieve HRM outcomes
 - the use of established HRM selection, assignment, training, performance evaluation and motivation tools
 - the conflict and stress issues associated with individuals tasked with project management, especially within a
 - human resource matrix management environment
 - HRM outcomes, critical success and failure criteria and HRM performance measures
 - the application of interpersonal skills
 - assessment of interpersonal strengths and weaknesses

- 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:

- project management
- human resources management
- planning and organising
- communication and negotiation
- problem solving
- leadership and personnel management
- monitoring and review skills
- attributes
 - empathetic
 - able to maintain an overview
 - communicative
 - positive leadership

Key Competencies or Generic Skills relevant to this unit include:

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 degree of difficulty in this unit.

- 1 Communicating idea and information (3)**
 - communication required to lead a team including negotiation skills and report writing
 - verbal communication skills including those involved in making presentations, participating in meetings, questioning and discussions
- 2 Collecting, analysing and organising information (2)**
 - tracking and monitoring of project
 - relevant skills associated with reviewing project
- 3 Planning and organising activities (2)**
 - planning own work and that of project team members
- 4 Working in a team (3)**
 - leading and representing the project team
 - working with others including external parties/clients and project team members
- 5 Using Mathematical ideas and techniques (1)**
 - calculation skills associated with data manipulation involved in project including financial data
- 6 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

7 Using technology (2)

- using word processing packages, spreadsheets, databases, other packages to produce written correspondence and reports of project activities, financial reporting, data collation
- using specific project management software tools

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 project such as:
 - current and future requirements for competency within the project team
 - staffing levels and competencies related to task
 - job descriptions including measures of performance
 - project organisation charts
 - staff recruitment and selection criteria
 - team and individual responsibilities, levels of authority and performance assessment criteria
 - responsibility assignment matrix
 - HRM plans and procedures
 - records of internal and external influences on HRM performance
 - HRM lessons learnt

Processes that could be used as evidence include:

- how human resources requirements are determined for projects
- how required human resources are allocated to and/or selected for projects
- how team members are managed throughout the project with respect to human resources management within the project
- how human resources are managed throughout the project including required training and development
- how problems and issues with respect to human resources and arising during projects are identified and addressed
- how project is reviewed with respect to human resources management
- how improvements to human resources management of projects are 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 quality within projects

Integrated competency assessment:

- this unit should be assessed with other project management units at AQF level 5, as applicable to candidate's management role in project as part of an integrated assessment activity.

PM507 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 This unit addresses communications management within projects. A project manager usually performs this function. The functions performed by a program manager to manage communications within multiple projects are addressed in PM607.

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.

19. Plan communications processes

- 1.1 Information requirements are identified, documented and analysed, with input from stakeholders and guidance of higher project authorities, as the basis for communications planning
- 1.2 Agreed *communications management* plans are implemented 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 implemented and maintained to ensure the quality, validity, timeliness and integrity of information and communication

20. 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
- 21. Manage project reporting**
- 3.1 Communication and information management systems problems are identified, reported to higher project authorities, 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
- 22. 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 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.

Communications management 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

Project Management Information Systems (PMIS) may include:

- complex computer-based systems
- simple manual systems

- modified systems to cater for unique project requirements

Communication networks may include:

- formal networks
- informal networks
- specific networks
- the organisation's communication networks
- client organisation 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 competency in this unit must be able to provide evidence that responsibility was taken within projects for managing communications. This will include evidence of managing the work of others working within the project team with respect to communications.

Specific evidence requirements

Required knowledge and understanding include:

- broad knowledge and understanding of:
 - the principles of communications management and their application
 - acceptance of responsibilities for communications management
 - maintenance of project management information systems and communications networks
 - drafting, vetting, approving, obtaining endorsement and forwarding of reports to higher authority
 - the place of communications management in the context of the project life cycle and other project management functions
 - appropriate communication management technologies; their capabilities, limitations, applicability and
 - contribution to project outcomes

Required skills and attributes include:

- project management
- planning and organising
- communication and negotiation

- problem solving
- leadership and personnel management
- monitoring and review skills

- attributes
 - organised
 - able to maintain an overview
 - communicative
 - positive leadership

Key Competencies or Generic Skills relevant to this unit include:

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 degree of difficulty in this unit.

- | | |
|---|--|
| 1 Communicating idea and information (3) | <ul style="list-style-type: none"> • communication required to lead a team including negotiation skills and report writing • verbal communication skills including those involved in making presentations, participating in meetings, questioning and discussions |
| 2 Collecting, analysing and organising information (2) | <ul style="list-style-type: none"> • tracking, monitoring and control of project communications • relevant skills associated with reviewing project |
| 3 Planning and organising activities (2) | <ul style="list-style-type: none"> • planning own work and that of project team members |
| 4 Working in a team (3) | <ul style="list-style-type: none"> • leading and representing the project team • working with others including external parties/clients and project team members |
| 5 Using Mathematical ideas and techniques (1) | <ul style="list-style-type: none"> • calculation skills associated with data manipulation involved in project including financial data |
| 6 Solving problems (3) | <ul style="list-style-type: none"> • applying problem solving skills as required to address problems arising in managing the project • assisting others to solve problems arising within project |
| 7 Using technology (2) | <ul style="list-style-type: none"> • using word processing packages, spreadsheets, databases, other packages to produce written correspondence and reports of project activities, financial reporting, data collation • using specific project management software tools |
| Innovation skills (2) | <ul style="list-style-type: none"> • using review process to inform future activity in project management |

Products that could be used as evidence include:

- documentation produced in managing project such as:
 - communications management plans
 - PMIS structure and procedures
 - progress reports
 - records of collection, validation, storage, retrieval, analysis and/or dissemination of information
 - records of meetings
 - post-validation process modifications
 - communications networks
 - records of communications problems and solutions

Processes that could be used as evidence include:

- how information requirements are determined for projects
- how communication plans and associated processes are developed for projects
- how team members are managed throughout the project with respect to communications management within the project
- how information is managed during the project
- how project reporting processes are managed during projects
- how problems and issues with respect to communications and arising during projects are identified and addressed
- how project is reviewed with respect to communications management
- how improvements to communications management of projects are 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 communications within projects

Integrated competency assessment:

- this unit should be assessed with other project management units at AQF level 5, as applicable to candidate's management role in project as part of an integrated assessment activity.

PM508 Manage project risk

Unit Descriptor This unit specifies the outcomes required to avoid adverse affects on project outcomes.

Competency Field *Business management services*

Domain *Project management*

Application of the competency This unit addresses risk management within projects.
A project manager usually performs this function. The functions performed by a program manager to manage risks within multiple projects are addressed in PM608.

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.

- | | |
|---|---|
| 23. Determine project risks | <ul style="list-style-type: none"> 1.1 <i>Risks</i> are identified, documented and analysed, in consultation with stakeholders and higher project authorities, as the basis for <i>risk management planning</i> 1.2 Established <i>risk management techniques and tools</i> are used to analyse risks, assess options and recommend preferred risk approaches to higher project 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 <i>processes</i> and procedures are implemented to enable effective management and communication of risk events, responses and results |
| 24. Monitor and control project risk | <ul style="list-style-type: none"> 2.1 Project is managed in accordance with established project and risk management plans to ensure common approach to achievement of objectives 2.2 Progress is monitored against project plans to identify <i>variances and recommend responses</i> to 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 |

25. 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 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.

Risk may be:

- potential
- perceived
- actual
- likely/probable

Risk management 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 risk management methods, tools and techniques
- be conducted routinely or as changing circumstances dictate

Risk management techniques and tools may include:

- calling upon personal experience and subject matter experts
- conducting or supervising qualitative and/or quantitative risk analysis, such as schedule simulation, decision analysis, contingency planning, alternative strategy development
- using specialist risk analysis tools to assist in the decision making process

Processes may include:

- setting key milestones at significant points during the project and at completion
- measurement of actual progress against planned milestones
- recording and reporting of major variance
- implementation of risk control trigger mechanisms
- communication with stakeholders, dispute resolution, and modification procedures

Variances and recommended responses 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 competency in this unit must be able to provide evidence that responsibility was taken within projects for risks associated with the projects. This will include evidence of managing the work of others working 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:
 - uncertainty and the means of measurement
 - personal attitudes to uncertainty and risk, and how they might effect the project's approach to risk management
 - the place of risk management in the context of the project life cycle
 - appropriate risk management methodologies, their capabilities, limitations, applicability and outcomes

Required skills and attributes include:

- 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 include:

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 degree of difficulty in this unit.

- | | |
|---|--|
| 1 Communicating idea and information (3) | <ul style="list-style-type: none"> • communication required to lead a team including negotiation skills and report writing • verbal communication skills including those involved in making presentations, participating in meetings, questioning and discussions |
| 2 Collecting, analysing and organising information (2) | <ul style="list-style-type: none"> • tracking and monitoring of project • relevant skills associated with reviewing project |
| 3 Planning and organising activities (2) | <ul style="list-style-type: none"> • planning own work and that of project team members |
| 4 Working in a team (3) | <ul style="list-style-type: none"> • leading and representing the project team • working with others including external parties/clients and project team members |
| 5 Using Mathematical ideas and techniques (1) | <ul style="list-style-type: none"> • calculation skills associated with data manipulation involved in project including financial data |
| 6 Solving problems (3) | <ul style="list-style-type: none"> • applying problem solving skills as required to address problems arising in managing the project • assisting others to solve problems arising within project |
| 7 Using technology (2) | <ul style="list-style-type: none"> • using word processing packages, spreadsheets, databases, other packages to produce written correspondence and reports of project activities, financial reporting, data collation • using specific project management software tools |
| Innovation skills (2) | <ul style="list-style-type: none"> • using review process to inform future activity in project management |

Products that could be used as evidence include:

- documentation produced in managing project such as:
 - application of lessons learned from previous project(s) in planning 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 risk are identified and documented for projects
- how risk management plan is developed for projects
- how team members are managed throughout the project with respect to risk management
- how risk is managed during the project
- how risks arising during projects are identified and addressed
- how project is reviewed with respect to risk management
- how improvements to risk management of projects are 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 risks within projects

Integrated competency assessment:

- this unit should be assessed with other project management units at AQF level 5, as applicable to candidate's management role in project as part of an integrated assessment activity.

PM509 Manage project procurement

Unit Descriptor

This unit specifies the outcomes required for effective contracting activities in the project. It covers the stages from formation, such as product and contract definition and market analysis, through the tendering process to contract formation, contract performance, management and administration after contract award.

Competency Field

Business management services

Domain

Project management

Application of the competency

This unit addresses procurement and contract management within projects.

A project manager usually performs this function. The functions performed by a program manager to manage procurement within multiple projects are addressed in PM609.

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.

26. Determine procurement requirements

- 1.1 Procurement requirements are identified, with input from stakeholders and guidance of higher project authorities, as the basis for procurement planning and the contract
- 1.2 Agreed *procurement management plans* and strategies are implemented and maintained to ensure clarity of understanding between stakeholders and achievement of project objectives

27. 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 are implemented and communicated to stakeholders and prospective contractors or suppliers to ensure fair competition
- 2.3 Approvals are obtained from higher project authority to enable formal discussions to be conducted

- | | |
|--|--|
| 28. Conduct contracting and procurement activities | <p>3.1 Agreed proposals are communicated to prospective contractors or suppliers to ensure clarity of understanding of project objectives</p> <p>3.2 Responses are evaluated and preferred contractors or supplier are selected in accordance with current legal requirements and agreed selection processes</p> <p>3.3 Negotiations are conducted with the preferred contractor or supplier, with guidance of higher project authority if necessary, to agree contract terms and conditions, establish common goals and minimise uncertainty</p> |
| 29. Implement the contract and/or procurement | <p>4.1 Established procurement plans are implemented, and <i>modified</i> with higher project authority approval, to ensure common approach to achievement of objectives</p> <p>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</p> <p>4.3 Procurement management problems are identified, reported to higher project authorities, and agreed remedial actions are implemented to ensure project objectives are met</p> |
| 30. Manage contract and procurement finalisation procedures | <p>5.1 Finalisation activities are conducted to ensure contract deliverables meet contractual requirements</p> <p>5.2 Project outcomes are reviewed using available <i>records</i> and information to determine the effectiveness of contracting and procurement processes and procedures</p> <p>5.3 Lessons learned and recommended improvements are identified, documented and passed on to higher project authority for application in future projects</p> |

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.

Procurement management plans and associated 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 procurement management methods, tools and techniques
 - be conducted routinely or as changing circumstances dictate
 - take into account internal organisational change and external environmental change
- Procurement management plans may include:*
- defining tasks and assigning responsibilities for the development
 - management
 - administration
 - performance
 - test and acceptance
 - discharge procedures in accordance with endorsed organisational policy
- 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 may include:*
- product specifications
 - procurement management plans
 - 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 registers

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 unit must be able to provide evidence that responsibility was taken within projects for procurement and contract management. This will include evidence of managing the work of others working within the project team, with respect to procurement and contract management.

Specific evidence requirements

Required knowledge and understanding include:

- broad knowledge and understanding of:
 - the principles of procurement management and their application
 - the principles of contracts and contractual legal requirements from the project management perspective
 - the selection of appropriate formal arrangements and the legal implications of such agreements
 - contract negotiation skills
 - procurement management processes and procedures

Required skills and attributes include:

- project management
- contract management
- planning and organising
- communication and negotiation
- problem solving
- leadership and personnel management
- negotiation
- monitoring and review skills
- attributes
 - attention to detail
 - able to maintain an overview
 - thoroughness
 - positive leadership

Key Competencies or Generic Skills relevant to this unit include:

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 degree of difficulty in this unit.

1 Communicating idea and information (3)

- communication required to lead a team including negotiation skills and report writing
- verbal communication skills including those involved in making presentations, participating in meetings, questioning and discussions

- 2 Collecting, analysing and organising information (2)**
 - tracking and monitoring of project
 - relevant skills associated with reviewing project
- 3 Planning and organising activities (2)**
 - planning own work and that of project team members
- 4 Working in a team (3)**
 - leading and representing the project team
 - working with others including external parties/clients and project team members
- 5 Using Mathematical ideas and techniques (1)**
 - calculation skills associated with data manipulation involved in project including financial data
- 6 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
- 7 Using technology (2)**
 - using word processing packages, spreadsheets, databases, other packages to produce written correspondence and reports of project activities, financial reporting, data collation
 - using specific project management software tools
- 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 project such as:
 - product specifications
 - procurement management plans
 - contract documentation
 - records of evaluation and selection of preferred contractors
 - 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 are identified and documented for projects
- how procurement management plan is developed for projects
- how team members are managed throughout the project with respect to management of procurement within the project
- how procurement is managed during the project
- how procurement problems and issues arising during projects are identified and addressed
- how contract finalisation activities are managed
- how project is reviewed with respect to procurement management
- how improvements to procurement management for projects are 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 procurement within projects

Integrated competency assessment:

- this unit should be assessed with other project management units at AQF level 5, as applicable to candidate's management role in project as part of an integrated assessment activity.