



Australian Government

Department of Education, Employment and Workplace Relations

ICTPMG6033A Develop a project management plan

Release: 1

ICTPMG6033A Develop a project management plan

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	<p>This unit describes the performance outcomes, skills and knowledge to develop a plan for a telecommunications project. It includes assessing project requirements and planning for all stages to completion and final documentation.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of endorsement but users should confirm requirements with the relevant federal, state or territory authority.</p>
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Application of the Unit

Application of the unit	<p>Technical staff apply the knowledge and skills in this unit to switching, transmission and radio network and cable, optical fibre, radio, microwave and satellite transmission paths.</p> <p>Relevant job roles include provisioning of installations, maintenance, upgrades and new services.</p>
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

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

ELEMENT	PERFORMANCE CRITERIA
1. Prepare project management plan	1.1. Evaluate and assess <i>project brief and related documents</i> 1.2. Produce a <i>document</i> on project <i>tasks and associated timelines</i> , including installation processes and test requirements 1.3. Assess and produce a document on <i>resource requirements</i> to assist allocation of appropriate resources 1.4. Produce a <i>training plan</i> assessing training needs and associated timelines for efficient project implementation 1.5. Determine and document <i>budgetary requirements</i> 1.6. Assess the roles of all identified <i>parties</i> associated with the project to ensure their involvement 1.7. Produce a project verification document, including monitoring and control processes and review processes such as <i>quality audits</i> 1.8. Consult with all relevant parties prior to finalising draft plan and make changes as appropriate
2. Develop and evaluate management plan	2.1. Produce a preliminary plan for consultation including identified <i>factors</i> that may impact on the realisation of the project and observance of <i>relevant legislation, codes, regulation and standards</i> 2.2. Consult with customer and clarify any amendments 2.3. Develop a final plan with recommendations
3. Finalise documentation	3.1. Produce and document a final plan to include implementation details and training needs. 3.2. Present plan to customer and obtain sign off

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- analytical skills to compare and evaluate most effective technical solutions

REQUIRED SKILLS AND KNOWLEDGE

- communication skills to:
 - liaise with customers to ensure requirements are known and can be met within timeframes
 - negotiate approvals and contract arrangements with suppliers and contractors
- literacy skills to interpret technical specifications and related documentation and document technical requirements and procedures
- numeracy skills to:
 - determining workforce requirements
 - calculating budget requirements and limitations
 - assessing channel capacities and overall dimensioning requirements
- organisation skills to arrange training and relevant documentation
- planning and organisation skills to:
 - set out project requirements and priorities
 - make site access and equipment delivery arrangements
- problem solving skills to account for unexpected faults or equipment incompatibilities or logistics problems
- research skills to gain and maintain relevant and current technical product knowledge

Required knowledge

- common customer telecommunications applications and related equipment
- connections to carrier infrastructure or equipment
- current legislation relating to installation of telecommunications equipment and connection to carrier services
- customer premise equipment
- leasing versus purchase options to assist in delivering cost effective solutions
- network and transmission equipment
- network topologies, interface and interconnect solutions
- occupational health and safety (OHS) requirements for:
 - electrical safety
 - materials handling
 - physical hazards:
 - confined spaces
 - heights
 - lifting
- power requirements and electrical safety
- typical performance parameters and typical faults that may be encountered in customer equipment and related connection and transmission media
- various test equipment types suitable for tests to be made
- warranty information for equipment supplies and contractor work guarantees

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>Evidence of the ability to:</p> <ul style="list-style-type: none"> • prepare a project management plan • develop and evaluate a project management plan.
Context of, and specific resources for assessment	<p>Assessment must ensure:</p> <ul style="list-style-type: none"> • a telecommunications operations site with relevant telecommunications technology and infrastructure • relevant databases, legislative requirements and other site and project related documentation • organisational documentation relating to equipment, warranties, leasing, contracts and audits.
Methods of assessment	<p>A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:</p> <ul style="list-style-type: none"> • direct observation of the candidate undertaking planning tasks • review of reports and plans completed by the candidate • oral or written questioning to assess knowledge of planning, types of systems and applications • a completed project plan for a telecommunications project.
Guidance information for assessment	<p>Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example:</p> <ul style="list-style-type: none"> • ICTNPL6029A Plan the development and growth of the telecommunications network • ICTPMG6034A Prepare a detailed design brief. <p>Aboriginal people and other people from a non-English speaking background may have second language issues.</p> <p>Access must be provided to appropriate learning and</p>

EVIDENCE GUIDE

	<p>assessment support when required.</p> <p>Assessment processes and techniques must be culturally appropriate, and appropriate to the oral communication skill level, and language and literacy capacity of the candidate and the work being performed.</p> <p>In all cases where practical assessment is used it will be combined with targeted questioning to assess required knowledge. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency.</p> <p>Where applicable, physical resources should include equipment modified for people with special needs.</p>
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Range Statement**RANGE STATEMENT**

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

Project brief and related documents refer to:

- equipment and system needs:
 - computer network equipment site evaluation, including barriers to installation
 - switching
 - transmission and radio network
 - transmission paths:
 - cable,
 - optical fibre
 - radio
 - microwave
 - satellite
- safety aspects of building or area using

RANGE STATEMENT	
	<p>available software:</p> <ul style="list-style-type: none"> • building and equipment hazards • ceiling access • construction type • system design and configuration.
<i>Document</i> may refer to:	<ul style="list-style-type: none"> • activities: <ul style="list-style-type: none"> • dependencies • inspection • manufacturer's technical manuals and responsibilities • requirements to ensure that installation and service activities are performed under controlled conditions • technical standards • testing and related procedures • work instructions • contingency plans to account for delays and other problems • critical paths and timelines • quality plans: <ul style="list-style-type: none"> • check lists • Gantt charts • software based programmes • process flow charts • tasks and overall work structure.
<i>Tasks and associated timelines</i> may include:	<ul style="list-style-type: none"> • estimating overall timeframes based on standard installation times • identifying critical paths and minimum timelines • identifying independent tasks and those that depend on others • identifying timeframes associated with each aspect of the project • initiating documentation: <ul style="list-style-type: none"> • sales orders • quotation forms • specification lists • making allowances for: <ul style="list-style-type: none"> • likely network outages and restrictions • anticipated barriers and contingency

RANGE STATEMENT	
	<p>provisions for delays and problems</p> <ul style="list-style-type: none"> • special award conditions: <ul style="list-style-type: none"> • weather allowance • site allowance • district allowance • timelines for planning approvals: <ul style="list-style-type: none"> • government planning bodies • local government • frequency spectrum agency.
<p><i>Resource requirements</i> may include:</p>	<ul style="list-style-type: none"> • locating possible resource banks • merits of using contract versus enterprise resources • material requirements including spare parts • identifying documentation required including: <ul style="list-style-type: none"> • design briefs • labour contracts • manuals • plans • specifications • identifying systems, including communication tools • identifying test equipment: <ul style="list-style-type: none"> • hand-held cable testers • insulation resistance tester • multimeter • optical time domain reflectometer (OTDR) • oscillator and probe set • proprietary devices • protocol analysers • pulse echo tester • signal generator • signal level meter • spectrum analyser • time domain reflectometer (TDR) • using tendering process according to enterprise policy: <ul style="list-style-type: none"> • by letter or through the press, contracting and subcontracting • consideration of:

RANGE STATEMENT	
	<ul style="list-style-type: none"> • capacity • company performance • delivery times • performance • price • product type • quality assurance processes • quality.
<i>Training plans</i> may include:	<ul style="list-style-type: none"> • consideration of costs • location of delivery • method • project and customer needs and skills gaps • specific resources for training • timeframe • use of: <ul style="list-style-type: none"> • installation staff • specialist trainers.
<i>Budgetary requirements</i> may include:	<ul style="list-style-type: none"> • costings with compliance and profit margin • detailed financial statement • expenditure approval procedures in line with enterprise policy • risk analysis of financial options.
<i>Parties</i> may include:	<ul style="list-style-type: none"> • contractor • customer • designers • equipment manufacturers • installers • lessee • operational staff • planners • project management • site owner • sub contractor • suppliers.
<i>Quality audits</i> may refer to:	<ul style="list-style-type: none"> • reviews of process • reviews of methodology
<i>Factors</i> may include:	<ul style="list-style-type: none"> • competencies and skills gap • critical paths • equipment and system needs

RANGE STATEMENT	
	<ul style="list-style-type: none"> • independent tasks and relationship • network outage • resources: <ul style="list-style-type: none"> • tools and equipment • finance • manpower • machinery • equipment and spares • safety aspects • timelines.
<p><i>Relevant legislation, codes, regulations and standards</i> may include:</p>	<ul style="list-style-type: none"> • Australian Communications and Media Authority (ACMA) technical standards • Australian building codes and regulations • Environmental Protection Act • fire regulations • heritage legislation • industrial awards and conditions • International Standards ISO 9000 and 9001 • International Telecommunications Union (ITU) recommendations • noise abatement • OHS compliance requirements which may vary in different states and countries. • Telecommunications Act and associated codes • Trade Practices legislation.

Unit Sector(s)

Unit sector	Telecommunications
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Co-requisite units

Co-requisite units	

Co-requisite units		

Competency field

Competency field	Project management
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