



Australian Government

ICTCBL4023B Supervise cabling project

Release 1

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Modification History

Release	Comments
Release 2	This version first released with <i>ICT10 Integrated Telecommunications Training Package Version 3.0</i>. References to other units updated. Outcomes deemed equivalent.
Release 1	This version first released with <i>ICT10 Integrated Telecommunications Training Package Version 1.0</i>.

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to supervise a cabling project. It requires planning, preparing financial budgets and monitoring of cabling work.

Cable used must be compliant with appropriate Australian Communications and Media Authority (ACMA) technical standard requirements for underground, aerial, Category 5, 6, 6A, 7 or 7A, or unshielded twisted pairs (UTP). Cabling products must be ACMA-approved.

All customer cabling work in the telecommunications, fire, security and data industries must be performed by a registered cabler. All cablers are required to register with an ACMA-accredited registrar.

Application of the Unit

Technical staff who supervise a cabling project apply the skills and knowledge in this unit. Their job roles combine technical and organisational skills to ensure an effective outcome for the client.

This unit applies to indoor and outdoor installation within a customer premises. It may be applied to domestic, commercial or industrial installations. Communications applications include digital and analog, telephony, data, video, digital broadcasting, computer networks, local area network (LAN), wide area networks (WAN) and multimedia.

Licensing/Regulatory Information

Refer to Unit Descriptor.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>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.</i>

Elements and Performance Criteria

1. Plan and organise cabling activities	1.1 Obtain cabling installation specifications and project specifications from the customer 1.2 Prepare work schedules and installation plans identifying key dates and milestones 1.3 Organise resource requirements 1.4 Verify location of proposed installation according to the plans obtained from authorised personnel 1.5 Obtain information on location of other services from relevant authorities 1.6 Document plans for cabling project and advise relevant parties
2. Prepare financial budgets	2.1 Prepare budget identifying cost and expenditure items from scheduling and planning documentation 2.2 Advise relevant personnel of purchasing and other delegations within budget allocations 2.3 Prepare budget projections within estimated and approved contract pricing
3. Source human resource requirements for cabling	3.1 Estimate number and determine availability of suitable human resources according to contract requirements and relevant industrial and enterprise policy 3.2 Establish necessary competency and licence requirements of project personnel prior to recruitment 3.3 Schedule personnel workloads and allocate within industrial and enterprise requirements
4. Monitor cabling works	4.1 Follow occupational health and safety (OHS) processes and site-specific safety requirements according to plan 4.2 Monitor compliance regularly with customer specification, relevant legislation, codes, regulations and standards 4.3 Notify customer promptly on difficult or known problem areas 4.4 Reallocate work as required to meet client and company requirements 4.5 Monitor costs and time schedules to identify and resolve any potential problem 4.6 Provide a report on work progress activity and schedule
5. Evaluate outcomes of	5.1 Review cabling projects to identify areas where

cabling projects	performance has been below client and enterprise expectations 5.2 Implement recommendations to ensure effective improvements
6. Complete administrative tasks	6.1 Complete documentation 6.2 Notify customer and obtain sign off

Required Skills and Knowledge

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

Required skills

- analytical skills to read and interpret drawings related to:
 - cable coding system and identifiers
 - cable layouts
 - frame locations
 - outlet location
- communication skills to liaise with internal and external personnel on technical and operational matters
- literacy skills to:
 - interpret technical documentation, such as equipment manuals and specifications
 - prepare reports and document work
- numeracy skills to:
 - identify cost and expenditure from specifications
 - prepare budget
- planning and organisational skills to monitor progress of project
- problem solving skills to:
 - anticipate and respond to issues in project progress
 - solve equipment and logistics problems
- research skills to source labour and material supplies
- task management skills to:
 - adhere to all safety requirements
 - reprioritise work as required
 - work systematically with required attention to detail
- technical skills to schedule and monitor work.
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Required knowledge

- features and operating requirements of test equipment
- information required to advise operation of equipment according to a test specification
- legislation, codes of practice and other formal agreements that impact on the work activity
- manufacturer's requirements for safe operation of equipment
- specific OHS requirements relating to the activity and site conditions
- test methods and performance requirements
- typical issues and challenges that occur on site.

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	Evidence of the ability to: • complete all appropriate plans and financial budgets for cabling activities • supervise cabling project applying human resource policies including awards and conditions and all related OHS and work practices • monitor and implement alternate plans where necessary to meet work schedules and customer requirements • complete a project report on a cabling projects detailing recommendations for improvement.
Context of, and specific resources for assessment	Assessment must ensure: • site with cabling project • access to human resource policies, including awards and conditions and all related OHS and work practices • relevant regulatory and equipment documentation that impact on monitoring activities.
Methods of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: • review of a hands-on project completed by the candidate • review of an oral and written report prepared by the candidate, including completed documentation • direct observation of the candidate supervising a cabling project.
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: • ICTCBL3009B Install, terminate and certify structured cabling installation.

	Aboriginal people and other people from a non-English speaking background may have second language issues. Access must be provided to appropriate learning and assessment support when required. 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. 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. Where applicable, physical resources should include equipment modified for people with special needs.
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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.

Key dates and milestones may include:	• installation of other services • materials delivery • start and finish date or time.
Resource requirements may include:	• cable must be: • compliant with appropriate ACMA technical standard requirements for: • underground • aerial • Category 5, 6, 6A, 7 or 7A • UTP • cabling hardware requirements • cabling products must be ACMA-approved • competent staff • consumables • facilities and equipment • finances • time availability.
Plans may include:	• building • constructions • design • site layout drawings • street.
Authorised personnel may include:	• construction manager • project manager • site manager • site supervisor.
Relevant authorities may include:	• cable location services (Dial before you dig) • environment protection • local government • private owners • utility providers such as: • electricity • fire services

	• gas • other telecommunications providers • water.
Documentation may include:	• ACMA requirements • contract documentation • enterprise and client policy and procedures • estimations and quotations • work contracts • work plans and schedules.
Relevant legislation, codes, regulations and standards include:	• Australian Communications Industry Forum (ACIF) standards and codes • AS Communications Cabling Manual (CCM) Volume 1 • AS/NZS 3000:2007 • AS/NZS 3080:2003 • AS/NZS 3084:2003 • AS/NZS 3085.1:2004 • AS/NZS IEC 61935.1:2006 • AS/NZS IEC 61935.2:2006 • AS/NZS ISO/IEC 14763.3:2007 • AS/NZS ISO/IEC 15018:2005 • AS/NZS ISO/IEC 24702:2007 • cabling security codes and regulations • industrial awards and conditions • industry standards include: • regulated or industry codes of practice • appropriate ACMA technical standards • OHS • technical standards AS/ACIF S008:2006 and AS/ACIF S009:2006 • Trade Practices Act.

Unit Sector(s)

Telecommunications - Cabling