



Australian Government

ICTCBL306 Locate and identify cable system faults

Release: 2

ICTCBL306 Locate and identify cable system faults

Modification History

Release	Comments
Release 2	This version released with ICT Information and Communications Technology Training Package Version 5.0.
Release 1	This version released with ICT Information and Communications Technology Training Package Version 2.0.

Application

This unit describes the skills and knowledge required to locate and identify cable system faults in communications cables at enterprise and client premises sites. The cable types may be telecommunications digital, voice and data in digital TV cabling.

It applies to technical staff who are required to locate and rectify communications cable system faults, including local area networks (LAN) and wide area networks (WAN), master antenna television (MATV), cable television (CATV), closed-circuit television (CCTV), digital video broadcasting – terrestrial (DVB-T), digital video broadcasting – satellite (DVB-S), security alarm systems, fire systems, voice over internet protocol (VoIP) networks and radio communications. The telecommunications cabling types may be twisted pair, coaxial or fibre optic types.

Work functions in the occupational areas where this unit may be used are subject to regulatory requirements. Refer to the Implementation Guide Companion Volume or the relevant regulator for specific guidance on requirements.

Unit Sector

Telecommunications – cabling

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to locate and rectify cable fault	1.1 Prepare for given work according to relevant legislation, codes, regulations and standards 1.2 Inform appropriate personnel of existing and potential hazards on

ELEMENT	PERFORMANCE CRITERIA
	worksite 1.3 Arrange access to site according to required procedure 1.4 Establish type of cable and nature of fault from client for cable system 1.5 Select suitable testing tools and equipment and personal protective equipment to meet required industry standards
2. Locate and diagnose cable fault	2.1 Conduct appropriate test following work health and safety (WHS) and environmental requirements to identify type of cable fault 2.2 Isolate fault progressively to remove likely variables from assessment 2.3 Locate cable or cable termination equipment fault without undue interruptions to client activity in shortest possible time 2.4 Notify client of findings
3. Rectify fault	3.1 Present client with options to rectify fault 3.2 Advise client of costs of any repair not covered by service agreement 3.3 Conduct fault rectification, if client agrees, in a manner that is safe for repair team and client 3.4 Escalate any unresolved faults to other parties for resolution if required
4. Complete documentation and clean up worksite	4.1 Advise client of successful fault clearance and obtain sign off 4.2 Complete all records 4.3 Complete reports to justify fault diagnosis and rectification methodology if required 4.4 Remove all waste and debris from worksite and dispose of according to environmental requirements 4.5 Restore any changes made to worksite during fault repair to client's satisfaction

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

Skill	Description
-------	-------------

Reading	• Interprets, consolidates and checks information and data • Interprets technical documentation and test results from equipment manuals and specifications
Writing	• Accurately records and completes information in organisational systems • Prepares documentation and correspondence using clear language and correct spelling and terminology
Oral Communication	• Clearly explains detailed information using language, tone and pace appropriate to the audience • Interacts effectively in verbal exchanges using active listening, questioning, and reading of verbal and non-verbal signals to convey and clarify information
Numeracy	• Performs mathematical calculations to check, interpret and confirm numerical information
Navigate the world of work	• Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements • Seeks advice and clarification for new activities
Interact with others	• Uses a range of strategies and reads verbal and non-verbal signals to establish a sense of connection and build rapport with clients and workmates • Selects and uses appropriate conventions and protocols when communicating to clients and co-workers in a range of work contexts
Get the work done	• Takes responsibility for planning, sequencing and prioritising tasks and own workload for efficiency and effective outcomes • Accepts responsibility for addressing less predictable problems and initiates standard procedures in response, applying problem solving processes in determining a solution • Uses familiar digital technologies and systems to test cables, access information, enter data, present information and communicate with others

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTCBL306 Locate and identify cable system faults (Release 2)	ICTCBL306 Locate and identify cable system faults (Release 1)	Updates to application and knowledge evidence. Updates to template to apply consistent format between units.	Equivalent unit

Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTCBL306 Locate and identify cable system faults

Modification History

Release	Comments
Release 2	This version released with ICT Information and Communications Technology Training Package Version 5.0.
Release 1	This version released with ICT Information and Communications Technology Training Package Version 2.0.

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- identify different faults using checks, tests and fault-finding methodology
- determine and rank likely causes of fault
- provide the client with solutions for rectifying faults
- rectify the faults
- escalate unresolved faults to other parties for resolution
- comply with all related health and safety requirements and work practices.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- Australian Communications and Media Authority (ACMA) competency requirements for Telecommunications Cabling Provider Rules
- features and operating requirements of test equipment
- 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 testing instruments
- specific work health and safety (WHS) requirements relating to the activity and site conditions
- test methods and identify the test performance requirements
- typical issues and challenges that occur on site.

Assessment Conditions

Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.

This includes access to:

- sites where cable system tests may be conducted
- fault-finding equipment currently used in industry
- relevant regulatory and equipment documentation that impacts on cable system testing and fault-finding activities.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>