



Australian Government

ICTCBL404 Test cable bearers

Release: 1

ICTCBL404 Test cable bearers

Modification History

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

Application

This unit describes the skills and knowledge required to test cable bearers. It involves setting up, testing and interpreting test results and determining appropriate action for all cable types (metallic, optical fibre and coaxial).

It applies to technicians and line installers whose work involves testing cable bearers for connections, signal strength or loss of cable links on client cable and service provider networks, in accordance with manufacturer's and design specifications.

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 and set up for cable test	1.1 Obtain relevant legislation, codes, regulations and standards 1.2 Scope work by obtaining project plan from appropriate personnel and arrange for site access to comply with security arrangements 1.3 Notify appropriate personnel of identified safety hazards at worksite 1.4 Determine type of cable bearer and cable route from project plan and identify test requirements using work instructions 1.5 Obtain tools and safety equipment and material to perform tasks

ELEMENT	PERFORMANCE CRITERIA
	safely and efficiently 1.6 Select and use required protective equipment and make site safe and secure for testing work 1.7 Determine need for outage, extent, location and timing, if required, and negotiate with appropriate personnel 1.8 Select and set up suitable test equipment according to manufacturer's specifications for cable tests to be performed to ensure relevance of test data 1.9 Ensure equipment calibration certification is current to reduce possibility of unreliable test data and ensure traceability
2. Perform cable tests	2.1 Follow work health and safety (WHS) and environmental requirements for given work, and identify and avoid other services 2.2 Determine and record cable parameters for consideration in assessment of performance 2.3 Conduct performance tests as required by both equipment and enterprise specification for specific cable type and purpose
3. Interpret test results and determine action	3.1 Record test results for evaluation and compare against manufacturer's and site specifications 3.2 Analyse test results and evaluate cable performance with consideration of recorded cable parameters 3.3 Diagnose problems to determine cable faults and make arrangements for repairs or modifications 3.4 Retest faulty cable after faults have been rectified
4. Document test results and clean up site	4.1 Produce evaluated test results according to enterprise guidelines and without delay to ensure test results remain current 4.2 Update site and installation files to ensure traceability of information on system performance is maintained 4.3 Archive test record details for life of cable according to enterprise guidelines 4.4 Remove waste and debris from worksite and dispose of according to environmental requirements 4.5 Notify appropriate personnel of job completion and obtain sign off

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.4, 1.6-1.9, 2.1, 3.1	Analyses and consolidates information and data from a range of sources, against defined criteria and requirements, and checks for accuracy and completeness
Writing	1.2, 2.2, 3.1, 4.1, 4.2, 4.5	- Records information and prepares correspondence and documentation using clear language and organisational formats and protocols - Records information in organisational systems
Oral Communication	1.2, 1.3, 1.7, 3.3, 4.5	- Conveys and clarifies information effectively to a range of personnel using active listening, questioning and reading of verbal and non-verbal signals - Presents complex information in formal situations using clear and convincing language, tone and pace appropriate for the audience and purpose
Numeracy	2.3, 3.1-3.4, 4.1	Performs mathematical calculations to check, analyse, interpret and confirm results of system tests
Navigate the world of work	1.1, 1.4, 2.1, 2.3, 4.1, 4.3, 4.4	- Takes full responsibility for following policies and procedures - Identifies and resolves key variations to standard procedures identified from conducting tests
Interact with others	1.2, 1.3, 1.7, 4.5	Uses a range of strategies to establish a sense of connection and build rapport with clients and co-workers
Get the work done	1.2, 1.4-1.9, 2.1-2.3, 3.1, 3.3, 3.4, 4.1-4.4	- Plans and sequences complex tasks and workload, negotiating key aspects with others and taking into account capabilities, efficiencies and effectiveness - Makes critical decisions quickly and intuitively in complex situations, taking into consideration a range of variables including the outcomes of previous tests - Applies systematic and analytical decision making processes for complex and non-routine situations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTCBL404 Test cable bearers	ICTCBL4057A Test cable bearers	Updated to meet Standards for Training Packages	Equivalent unit

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for ICTCBL404 Test cable bearers

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Performance Evidence

Evidence of the ability to:

- perform tests on cable bearers
- use a range of tests
- interpret test results
- rectify a range of faults
- report on the completed tests
- 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

To complete the unit requirements safely and effectively, the individual must:

- describe the features, operation and specifications of test equipment
- identify a range of tests performed on cable bearers
- describe codes of practice and standard procedures that apply to cable bearers
- list common cable bearer faults and describe how to rectify them
- specify health and safety requirements relating to use and operation of test equipment
- outline the components of reports and identify the reasons for other documentation required when conducting tests.

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the telecommunications – cabling field of work and include access to:

- sites where testing may be conducted
- cabling and equipment currently used in industry

- relevant regulatory and equipment documentation that impacts on testing cable bearers.

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

Links

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