



Australian Government

ICTTEN410 Locate, diagnose and rectify faults

Release: 1

ICTTEN410 Locate, diagnose and rectify faults

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 locate, diagnose and rectify faults in telecommunications networks.

It applies to individuals who may work as telecommunications officers, communications cablers, or installers of customer premises' equipment, for optical and radio frequency (RF) equipment, multimedia and IP networks.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Telecommunications – Telecommunications Networks Engineering

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. Plan to locate and rectify fault	1.1 Prepare for given work according to relevant legislation, work health and safety (WHS) regulations, codes, standards and identified hazards 1.2 Arrange site access according to required procedure 1.3 Obtain information on the nature of fault from the customer 1.4 Obtain suitable testing tools and equipment and specify personal protective equipment 1.5 Conduct fault-finding using methodical and safe practices suitable for system and problem type

ELEMENT	PERFORMANCE CRITERIA
2. Locate and diagnose fault	2.1 Conduct appropriate test to identify type of fault 2.2 Isolate fault progressively to remove likely variables from assessment 2.3 Locate fault without undue interruptions to customer activity, in the shortest possible time 2.4 Notify customer of findings
3. Rectify fault	3.1 Determine options to rectify fault, and present options to customer 3.2 Advise customer of costs of any repair not covered by service agreement 3.3 Rectify fault if in agreement with client 3.4 Conduct work in a manner which is safe for repairer and customer 3.5 Refer any unresolved faults to other parties for resolution or escalation if required
4. Complete documentation and clean up worksite	4.1 Advise customer of successful fault clearance and secure 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 them according to environmental requirements 4.5 Restore any changes made to worksite during fault repair to the customers satisfaction

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
Writing	4.1, 4.2, 4.3	Completes technical workplace documentation using appropriate language and form to meet specific purpose

Oral Communication	1.3, 2.4, 3.2	• Articulates specific requirements clearly and checks understanding • Uses questioning and active listening to obtain required information
Numeracy	2.1	• Interprets numerical data from network tests
Navigate the world of work	1.1, 1.2, 3.4, 4.4, 4.5	• Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements relevant to own work context
Interact with others	1.3, 3.1, 3.3, 3.5, 4.1	• Selects appropriate form, channel and mode of communication when liaising with customers and personnel on technical and operational matters
Get the work done	1.2, 1.4, 1.5, 2.1, 2.2, 2.3, 3.1, 3.3	• Plans and implements tasks in line with organisational expectations, legislative requirements and work role • Recognises and anticipates a range of problems, actively looking for early warning signs and implementing contingency plans when appropriate • Uses digital technologies and systems to complete required tasks

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN401 Locate, diagnose and rectify faults	ICTTEN4081A Locate, diagnose and rectify faults	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 ICTTEN410 Locate, diagnose and rectify faults

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Performance Evidence

Evidence of ability to:

- effectively identify different faults
- establish context and background information, and determine and rank likely causes of fault
- obtain suitable tools and equipment and apply simple checks, tests and fault-finding methodology
- apply recommended means to rectify fault
- comply with all related work health and safety (WHS) requirements and work practices
- ensure customer and relevant personnel are informed of progress.

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:

- evaluate various fault-finding techniques for different networking situations
- specify and evaluate test equipment used for fault finding
- specify safety standards required when testing different types of systems
- outline common network faults and their rectification
- explain the value of specific regulatory and other documentation required when testing and reporting on test results.

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 networks engineering field of work and include access to:

- an appropriate site
- test and related equipment currently used in industry
- relevant technical specifications and requirements
- regulatory and site-related documentation.

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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