



Australian Government

ICTTEN523 Locate, diagnose and rectify complex system equipment faults

Release: 1

ICTTEN523 Locate, diagnose and rectify complex system equipment faults

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 7.0.

Application

This unit describes the skills and knowledge required to identify faults in upstream or downstream services that may require involvement of third-party providers.

It applies to individuals working as network engineering officers, installers, maintenance staff, and manufacturer and equipment specialists. They work closely with others and rectify technical faults.

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

Unit Sector

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. Prepare to locate and rectify complex faults	1.1 Notify client to arrange site access according to organisational procedures 1.2 Obtain and interpret results of action taken by previous fault repairers 1.3 Obtain fault history from relevant personnel and establish fault patterns according to data and organisational procedures and requirements 1.4 Discuss and develop strategies for fault identification and repair with relevant personnel 1.5 Obtain tools and test identified faulty equipment according to organisational procedures and manufacturer specifications

ELEMENT	PERFORMANCE CRITERIA
	1.6 Set up equipment according to manufacturer specifications and safe work practices, and reconfigure as required
2. Locate and diagnose faults	2.1 Isolate and test fault and remove likely variables from assessment, following organisational policies and procedures 2.2 Escalate equipment fault identification and seek diagnosis advice from relevant personnel 2.3 Diagnose fault according to organisational procedures 2.4 Provide progress reports to relevant personnel 2.5 Seek guidance from national support in fault diagnosis as required, and with third-party vendors for unknown faults 2.6 Negotiate required system downtime with relevant personnel
3. Rectify faults	3.1 Identify fault rectification options and present to client 3.2 Rectify fault according to findings 3.3 Replace, reprogram and repair faulty equipment according to service agreement and guidance 3.4 Dismantle and remove temporary service according to organisational requirements 3.5 Perform routine checks and identify faults 3.6 Notify client of additional faults and replace, reprogram and repair faults within the scope of agreement
4. Clean up worksite and complete documentation	4.1 Record and document fault location and equipment faults 4.2 Remove and dispose of waste and debris from worksite according to environmental requirements 4.3 Restore worksite to client's satisfaction and receive client signoff 4.4 Complete and submit required documentation and explain rectification actions to relevant personnel

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
Numeracy	Uses mathematical formulae to interpret technical data, such as specifications of equipment operations
Oral communication	- Liaises and negotiates with clients, repairers and technical staff using required strategies to extract main ideas and information from oral texts regarding technical and operation matters - Employs listening and questioning techniques to confirm

SKILL	DESCRIPTION
	understanding
Reading	Identifies, analyses and evaluates technical documentation including codes, standards and regulatory information
Writing	Prepares written reports and workplace documentation, incorporating technical language to communicate complex information
Teamwork	- Selects protocols and conventions for communicating with technical personnel and customers in a broad range of work contexts - Collaborates with others to negotiate agreeable outcomes
Planning and organising	Uses a combination of formal, logical planning processes to identify and rectify technical faults
Problem solving	Uses analytical processes to decide on a course of action, establishing criteria for deciding between options, and seeking input and advice from others before taking action when necessary
Self-management	Takes personal responsibility for adherence to legal and regulatory responsibilities and organisational policies and protocols required to own work
Technology	Identifies key principles and concepts underpinning design and operation of digital systems and tools, and applies these as required

Unit Mapping Information

Supersedes and is equivalent to ICTTEN508 Locate, diagnose and rectify complex faults.

Links

Companion Volume Implementation Guide is found on VETNet -

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