



Australian Government

ICTSAS309 Maintain and repair ICT equipment and software

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 6.0.

Application

This unit describes the skills and knowledge required to carry out maintenance and fault repair according to organisational procedures, in order to keep Information and Communications Technology (ICT) equipment and software operating.

It applies to frontline technical support individuals who work under a level of supervision and have some responsibility to maintain and repair ICT equipment and software.

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

Unit Sector

Systems administration and support

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. Determine and undertake required equipment maintenance	1.1 Access ICT equipment that requires maintenance 1.2 Examine and review organisational ICT equipment maintenance procedures 1.3 Determine and undertake internal maintenance according to organisational maintenance procedures 1.4 Report problems to required personnel
2. Diagnose and repair faults	2.1 Identify faulty ICT equipment and software 2.2 Test faulty ICT equipment and software according to manufacturing guidelines and task requirements 2.3 Analyse test results 2.4 Review historical fault data

ELEMENT	PERFORMANCE CRITERIA
	2.5 Develop plans, with prioritised tasks and contingency arrangements for repair and replacement of faulty equipment and software 2.6 Liaise with required personnel and obtain plan approvals 2.7 Obtain ICT components and repair equipment and software in a timely, organised manner, following work health and safety (WHS) standards
3. Update documentation and make recommendations for future maintenance	3.1 Record maintenance, fault data and equipment modifications according to organisational standards 3.2 Identify and report instances where preventative measures were required 3.3 Dispose of faulty parts and other waste according to environmental guidelines 3.4 Review and update maintenance and fault data and report outcomes to required 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
Reading	Integrates and evaluates a range of textual information to record and maintain required procedures
Writing	Conveys specific information using precise language and the required format for intended audience and purpose and records information
Oral Communication	Articulates clearly using required language and listening and questioning techniques to report data and confirm proposed plans
Numeracy	Recognises and applies familiar measurements relating to time durations
Teamwork	- Works in a team and contributes to broader work goals when addressing organisational standards and reporting to required personnel - Communicates in the required format with whom and how when reporting problems, gaining approval for plans and reviewing and updating data and reporting outcomes

Planning and organising	Plans a range of routine and some non-routine maintenance tasks and repair and replacement of faulty equipment, accepting stated goals and aiming to achieve them efficiently
Problem solving	- Selects from a range of predetermined options in routine situations, identifying and taking situational factors into account when determining whether procedures can be handled internally - Selects from a range of predetermined options when diagnosing and repairing faults, identifying and taking situational factors into account
Technology	Interprets key principles and concepts that underpin the design and operation of digital systems and tools, and applies these when troubleshooting existing technology, repairing faults and making recommendations for future maintenance

Unit Mapping Information

Supersedes and is equivalent to ICTSAS306 Maintain equipment and software.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for ICTSAS309 Maintain and repair ICT equipment and software

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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:

- carry out maintenance and fault repair procedures on the following, on at least one separate occasion:
 - ICT equipment
 - software.

In the course of the above, the candidate must:

- obtain and review previous ICT equipment fault data
- resolve failures and performance degradation
- analyse test results
- examine and review organisational ICT equipment maintenance procedures
- undertake maintenance according to organisational maintenance procedures
- identify and repair a range of ICT equipment and software problems
- develop plans for maintenance and fault repair
- maintain accurate records according to organisational guidelines.

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:

- equipment and software purpose, standard operating characteristics and maintenance procedures
- internal maintenance organisational procedures
- preventative maintenance procedures
- technical documents in regard to:
 - equipment and maintenance procedures
 - help-desk response level escalation procedures

- operation of technical diagnostic tools
- quality assurance practices that may be used in maintaining and repairing ICT equipment and software
- Service Level Agreements (SLAs) to determine conditions of the SLA cover
- client warranty claims, repair and replacement procedures
- environmental guidelines that may be used in maintaining and repairing ICT equipment and software.
- organisational work health and safety (WHS) procedures that relate to maintaining and repairing.

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:

- technical environment with a variety of ICT equipment
- maintenance software and tools
- technical documentation
- organisational health and safety procedures.

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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