ICTRFN502 Test and measure cellular phone and network equipment performance

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 2.0.

Application

This unit describes the skills and knowledge required to analyse test results and recommend modifications to the network.

It applies to individuals working as field officers and supervisors from telecommunications carriers, service providers, contractors and other public or private organisations who perform measurements during equipment upgrades or during commissioning, acceptance testing and routine maintenance on cellular network equipment.

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

Unit Sector

Telecommunications – radio frequency networks

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Prepare to test cellular phone and network equipment	1.1 Obtain and follow relevant legislation, codes, regulations and standards 1.2 Scope work by obtaining work details from appropriate personnel and arrange for site access to comply with security arrangements 1.3 Evaluate manufacturer's technical documentation and network procedures to plan test schedule for cellular network 1.4 Verify calibration of test equipment to ensure that tested

	cellular equipment is compliant
	1.5 Prepare cellular equipment for testing according to manufacturer's test procedure
	1.6 Notify operational staff of test and measurement schedule to ensure minimal impact on cellular network
2. Test and measure cellular phone and network equipment	2.1 Work safely following work health and safety (WHS) and environmental requirements for given work, identifying hazards and using personal protective equipment
	2.2 Configure network equipment for testing and set options to record test results
	2.3 Block or mask alarms that may be triggered and interfere with test program
	2.4 Run performance measurement software with options set and record test results
	2.5 Re-establish alarms and normal operational status at conclusion of tests, and notify appropriate personnel of completion of test schedule
3. Analyse measurement and prepare evaluation report	3.1 Analyse results of performance tests and measurements and determine performance level of cellular equipment and compatibility with network
	3.2 Prepare evaluation report, making recommendations on network modifications or changes to configurations settings for improved quality of service
	3.3 Present test results and evaluation report to appropriate personnel according to enterprise policy

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, 1.3, 1.5, 3.3	• Recognises and interprets regulatory and technical information from relevant sources to determine all specifications and frameworks
Writing	1.6, 2.4, 2.5, 3.2	• Uses clear, specific and industry related terminology to complete and update workplace documentation and when presenting information

		to work associates, supervisors, team members and clients
Oral Communication	1.2, 1.6, 2.5, 3.3	• Liaises with internal and external personnel about technical requirements using specific and relevant language • Uses listening and questioning techniques to confirm understanding
Numeracy	3.1	• Evaluates and interprets technical data and results according to predetermined specifications
Navigate the world of work	2.1	• Understands the nature and purpose of own role and associated responsibilities • Takes personal responsibility for adherence to legal and regulatory requirements, with specific reference to safety
Get the work done	1.1-1.5, 2.2-2.5, 3.1	• Determines job priorities and works logically and systematically to undertake clearly defined and familiar tasks • Understands the purposes and specific functions of common digital systems and uses them effectively to complete routine tasks • Takes responsibility for routine decision making by selecting from a range of predetermined options in routine situations, identifying and taking some situational factors into account • Diagnoses faults in different situations, adapts procedures and modifies activities depending on operational contingencies, risk situations and environments • Implements actions according to a predetermined plan, making slight adjustments if necessary and addressing some unexpected issues

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTRFN502 Test and measure cellular phone and network equipment performance	ICTRFN5148A Test and measure cellular phone and network equipment performance	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

PwC's Skills for Australia