



Australian Government

Assessment Requirements for ICTRFN403 Test and repair cellular network equipment

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.

Performance Evidence

Evidence of the ability to:

- prepare the cellular network alarm system
- produce an alarm list and use this to locate faults
- test cellular network parameters and performance
- measure output power received around a cell
- run diagnostic tests on sub-elements and subsystems
- locate and repair faulty sub-elements and subsystems.

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:

- explain anti-static protection and its importance and potential effect on cellular network equipment
- summarise cellular antenna installation procedures
- outline electrical concepts and measurements required for cellular network repairs
- explain electromagnetic radiation (EMR) and mitigation
- list the common network components and describe their basic functions
- provide an overview of:
 - the progression of generations of cellular networks
 - features and operating requirements of test equipment
- outline procedures for repairs and swap activities
- summarise test operation of cellular network equipment
- list and describe the tests required for network components
- describe the importance of voltage levels and polarity

- describe the precautions and actions required to minimise, control or eliminate hazards related to cellular network equipment installations.

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 should be typical of those experienced in the telecommunications – radio frequency networks field of work and include access to:

- a site for mobile phone network tests and measurements
- performance testing software
- relevant legislation and documentation to test and repair network equipment.

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

Links

Companion Volume implementation guides are found in VETNet -

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