Assessment Requirements for ICTRFN601 Monitor the capacity of and recommend changes to the cellular mobile network

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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:

- source and analyse relevant data to prepare a plan indicating growth potential and recommendations for meeting growth within timeframes
- use tools and software packages for forecasting and measurement
- identify site or channel capacity, relevant network growth and forecasting growth.

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 blocking, non-blocking and grade of service
- explain Erlang B measurements
- summarise features and operating requirements of test equipment
- outline field measurements for cell traffic capacity
- explain the information required to:
  - analyse and interpret statistical data as applied to teletraffic measurement
  - prepare and conduct a capacity measurement
- summarise legislation, codes of practice and other formal agreements that directly impact on radio communications site transmission
- outline the following including:
  - transmission lines
  - transmitter and receiver architecture and their impact on radio communications traffic
- outline switching architecture with specific reference to space and time switching
- outline the types of adjustments that need to be made to procedures to meet the requirements of particular sites and environmental conditions

- explain typical issues and challenges that occur in telecommunications cellular capacity design and how these may be addressed.

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:

- sites with cellular mobile network
- capacity monitoring data and 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