

Australian Government

Assessment Requirements for ICTTEN817 Plan transmission networks

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 7.0. |

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:

• plan at least two transmission networks.

In the course of the above, the candidate must:

- scope network requirements
- evaluate transmission options and select required transmission networks
- analyse effects of transmission path characteristics on transmission systems
- develop solutions for transmission impairments
- select required testing regimes for transmission technologies
- determine key multiplexing features of transmission technologies.

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:

- required legislation, codes, company work practices, regulations and standards, workplace health and safety (WHS) requirements for scoped work
- alternating current and transmission line theory
- emerging network switching and transmission technologies
- network capacity and capability management
- capacity limitation of various platforms
- · commercial considerations of Access Network deployment
- common switching and transmission support services
- compatibility issues for new technologies and equipment
- currency of technology and equipment under consideration
- features of:

- data transmission
- digital multiplexing techniques and hierarchies
- enterprise deployment rules
- exemption process criteria
- network topologies
- product capability and availability that are allowable within a transmission network
- aspects of networks when planning a network, including:
 - alarm management
 - bearers
 - performance monitoring systems
 - transmission
 - architectures and geographical categorisation
 - information sources
 - technology and equipment
- cost analysis for a planned network
- workplace documentation, including reports.

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:

- a site to plan transmission network
- equipment and system manuals and specifications
- legislation and documentation to plan a transmission network

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 Guide is found on VETNet https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2