



Australian Government

ICTTEN211 Work effectively in a telecommunications network environment

Release: 1

ICTTEN211 Work effectively in a telecommunications network environment

Modification History

Release	Comments
Release 1	This version released with ICT Information and Communications Technology Training Package Version 5.0.

Application

This unit describes the skills and knowledge required to prepare for and work within a telecommunications network environment by familiarising oneself with the devices required to work on basic telecommunications networks and by performing information transmissions.

It applies to entry-level workers who undertake basic information transmission tasks on telecommunications networks.

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

Unit Sector

Telecommunications – Telecommunications Network Engineering

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. Use telecommunications devices to transmit information	1.1. Verify requirements for information transmission according to work specifications 1.2. Identify and select an appropriate telecommunications device for information transmission 1.3. Determine the appropriate medium to transmit information 1.4. Transmit information to identified recipients
2. Use transmitted information	2.1 Identify and use physical mediums to transmit information across devices and cables 2.2 Calculate physical distance characteristics that may affect each

ELEMENT	PERFORMANCE CRITERIA
	medium used 2.3 Calculate signal losses in relation to medium used 2.4 Connect test devices and record readings
3. Finalise telecommunications tasks	3.1 Complete finalisation report according to enterprise policies 3.2 Submit report to customers and stakeholders 3.3 Clean-up and reinstate site to original condition

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	Uses explicit strategies to make connections between information and ideas obtained within specifications and manufacturers manuals
Writing	Develops material for a specific audience using clear and detailed language in order to convey explicit information for findings report
Oral Communication	Participates in a verbal exchange of information by listening and questioning
Numeracy	Uses mental and written calculation methods as well we technological tools to problem solve
Get the work done	Interprets textual information from technical sources to identify relevant and key information

Unit Mapping Information

No equivalent unit. New unit.

Links

Companion Volume Implementation Guides are available from VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>

Assessment Requirements for ICTTEN211 Work effectively in a telecommunications network environment

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Performance Evidence

The candidate must demonstrate the ability to perform the tasks outlined in the elements, performance criteria, and foundation skills, and to:

- determine the basic components used in two telecommunications devices
- identify at least two signal devices and two transmission mediums used in telecommunications system/s in two different situations
- identify two components used in basic switching system/s.

Knowledge Evidence

The candidate must demonstrate the knowledge required to perform the tasks outlined in the elements, performance criteria, and foundation skills, which includes knowledge about:

- transmission devices used for telecommunications and information capture including:
 - smart phones
 - computers
 - network termination devices
 - ADSL/VDSL devices
 - telephones
 - wi-fi modem/router cabinets
- mediums for telecommunications information transmission including:
 - twisted pair cable and patch chords
 - coaxial cable
 - optical fibre cable
- radio and wireless associated connectors/sockets used in transmission mediums
- radio antenna types including:
 - wi-fi omni directional antenna
- switching and cable systems including:
 - analog and digital telephone systems

- ethernet switch
- point-to-point
- common exchange equipment including:
 - rack and stack equipment.

Assessment Conditions

Skills must be assessed in a workplace or simulated environment where conditions are typical of those in a telecommunications work environment or workplace.

Access is required to:

- two types of common customer equipment
- two signal transmission mediums in use
- two different telecommunications switching equipment types
- two telephone exchange devices
- cabling products and cable used in telecommunications systems.

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

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