



Australian Government

ICTTEN306 Commission an electronic unit

Release: 1

ICTTEN306 Commission an electronic unit

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 commission an electronic unit within a telecommunications environment with applications. Applications include voice over internet protocol (VoIP), radio frequency identification (RFID), security networks, telephony, data, video and multimedia.

The commissioning may be for a new installation or upgrade of capacity or technology for an existing network or subsystem for convergence to Next Generation Networks (NGN).

It applies to individuals working as field officers and technicians from telecommunications carriers, other service providers and contractors.

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

Unit Sector

Telecommunications – Telecommunications Networks 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. Prepare to commission electronic unit	1.1 Prepare for work following work health and safety (WHS) requirements 1.2 Organise resources based on existing and potential site hazards 1.3 Notify customer or network operations personnel to gain site access and network specifications 1.4 Determine the type and complexity of electronic unit from specifications

ELEMENT	PERFORMANCE CRITERIA
	1.5 Verify installed electronic unit and associated cabling conform to specifications 1.6 Establish commissioning dates and confirm with all parties 1.7 Determine commissioning parameters according to specification, and establish planned outage if required 1.8 Obtain test equipment and check suitability and calibration status 1.9 Produce a preliminary commissioning plan according to manufacturer's instructions and enterprise guidelines for discussion with customer 1.10 Inform affected customers of impending action and likely timing and impact of the work
2. Organise planned outages	2.1 Negotiate outage times with appropriate groups and affected customers to minimise disruptions 2.2 Refer to contingency plans and arrange for emergency communications if required 2.3 Notify alarm management centre of planned action 2.4 Obtain authority to proceed from relevant control centre and notify customers affected by the outage
3. Perform commissioning procedures	3.1 Program equipment or install software according to manufacturer's specifications 3.2 Set electronic unit parameters according to manufacturer's specifications and customer requirements 3.3 Set up test equipment and conduct tests according to manufacturer's specifications and industry practice 3.4 Connect and test network access facilities for correct performance 3.5 Conduct cut over according to project design and industry practice in consultation with appropriate personnel 3.6 Check remote alarm and monitoring features are functional, if applicable
4. Finalise commissioning documentation	4.1 Update relevant databases according to enterprise and network guidelines 4.2 Notify appropriate personnel of commissioning results and work completion 4.3 Complete administrative tasks according to industry practice and enterprise guidelines

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	1.4, 1.5, 1.7, 1.9, 2.2, 3.1-3.3, 4.1, 4.3	Recognises and interprets technical documentation and specifications to determine important information
Writing	1.3, 1.6, 1.9, 1.10, 2.1-2.4, 3.5, 4.1-4.3	Uses clear, specific and industry-related terminology to develop network documentation and update workplace records and in written communications with customers
Oral Communication	1.3, 1.6, 1.10, 2.1, 2.3, 2.4, 3.5, 4.2	- Liaises with appropriate personnel about technical requirements using specific and relevant language - Uses listening and questioning techniques to confirm understanding
Numeracy	1.7	Evaluates and reviews technical data to determine commissioning parameters
Navigate the world of work	1.1, 3.3, 3.5, 4.3	Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements
Interact with others	1.10, 2.1	Uses appropriate protocols when communicating in a range of familiar work contexts
Get the work done	1.2, 1.6-1.8, 2.2, 2.4, 3.1-3.4, 3.6, 4.1	- Determines job priorities and works logically and systematically to undertake clearly defined and familiar tasks, arrange site access and organise necessary equipment and resources - Implements actions according to a predetermined plan, making slight adjustments if necessary and addressing some unexpected issues - 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 - Initiates standard procedures when responding to familiar problems within immediate context - Understands purposes and specific functions of common digital systems and uses them effectively to

		complete routine tasks
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTTEN306 Commission an electronic unit	ICTTEN3077B Commission an electronic unit	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>

Assessment Requirements for ICTTEN306 Commission an electronic unit

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Performance Evidence

Evidence of ability to:

- commission an electronic unit according to specifications
- communicate effectively with stakeholders
- negotiate arrangements for commissioning
- deal with faults and problems and provide solutions.

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 electrical and/or optical properties to be measured
- identify common networking equipment
- outline legislation and licensing requirements surrounding installation of telecommunications equipment
- summarise network operation procedures
- explain power requirements and electrical safety
- describe test equipment types
- outline transmission type and signals that may be encountered.

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 networks engineering field of work and include access to:

- sites on which installation and commissioning procedures can be conducted

- relevant regulatory and equipment documentation that impact commissioning
- testing equipment currently used in industry.

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

Links

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