



Australian Government

ICTTEN320 Commission an electronic unit

Release: 1

ICTTEN320 Commission an electronic unit

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 commission an electronic unit within a telecommunications environment with applications.

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 (NGNs).

It applies to field officers and technicians working for 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 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. Prepare to commission electronic unit	1.1 Organise resources based on identified existing and potential site hazards 1.2 Notify customer or network operations personnel to gain site access and network specifications 1.3 Determine type and complexity of electronic unit from specifications 1.4 Verify installed electronic unit and associated cabling conform to specifications 1.5 Establish commissioning dates and confirm with all parties

ELEMENT	PERFORMANCE CRITERIA
	1.6 Determine commissioning parameters according to specification and establish planned outage as required 1.7 Obtain test equipment and check suitability and calibration status 1.8 Produce a preliminary commissioning plan for discussion with customer according to manufacturer instructions and enterprise guidelines 1.9 Inform affected customer/s of impending action and likely timing and impact of work
2. Organise planned outages	2.1 Negotiate outage times with appropriate groups and affected customer/s to minimise disruptions 2.2 Refer to contingency plans and arrange for emergency communications as 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 specifications and safety requirements 3.2 Set electronic unit parameters according to manufacturer specifications and customer requirements 3.3 Set-up test equipment and conduct tests according to manufacturer 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 as required
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 telecommunications industry practice and enterprise guidelines

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	Recognises and interprets technical documentation and specifications to determine important information
Writing	Uses clear, specific and industry-related terminology to develop network documentation and update workplace records, and in written communications with customers
Oral Communication	- Liaises with appropriate personnel about technical requirements using specific and relevant language - Uses listening and questioning techniques to confirm understanding
Numeracy	Evaluates and reviews technical data to determine commissioning parameters
Navigate the world of work	Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements
Interact with others	Uses appropriate protocols when communicating in a range of familiar work contexts
Get the work done	- 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

Unit Mapping Information

ICTTEN320 Commission an electronic unit supersedes and is equivalent to ICTTEN306 Commission an electronic 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 ICTTEN320 Commission an electronic unit

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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 at least once each for electrical and optical equipment, and to:

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

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:

- electrical and optical properties to be measured
- common networking equipment
- legislation and licensing requirements surrounding installation of telecommunications equipment
- industry standards and enterprise guidelines relevant to work activity
- commissioning plans based on manufacturer and enterprise guidelines
- network operation procedures
- power requirements and electrical safety
- test equipment types
- transmission type and signals that may be encountered.

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:

- site/s on which installation and commissioning procedures can be conducted
- testing equipment currently used in industry
- relevant regulatory and equipment documentation that impact commissioning.

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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