



Australian Government

ICTCBL318 Install and cut over metallic conductor cable to access network cabinet

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 3.0.

Application

This unit describes the skills and knowledge required to install and cutover a new metallic conductor cable to an access network distribution cabinet. The cable types are typically up to 200 pair copper cables in the carrier access network. The cabinet types may be mixed mode bearer cabinets in the access network and cross connect units (CCUs) or pillars.

It applies to linesworkers, field officers or technicians working for carriers, contractors or other service providers who install and rearrange copper cables in the carrier network.

Work functions in the occupational areas where this unit may be used are subject to regulatory requirements. Refer to the Implementation Guide Companion Volume or the relevant regulator for specific guidance on requirements.

Unit Sector

Telecommunications – cabling

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 for installation	1.1 Obtain relevant legislation, codes, regulations and standards for the job 1.2 Obtain project plan to scope work and then obtain approval from client on key features of installation 1.3 Arrange for site access to comply with landholder, government and statutory body regulations 1.4 Inspect site to develop work health and safety (WHS) plan and

ELEMENT	PERFORMANCE CRITERIA
	notify appropriate personnel of identified safety hazards 1.5 Determine cable route and type of network cable equipment from project plan, taking into account the location of other services 1.6 Obtain required plant, tools, safety equipment and materials for cabinet entry 1.7 Coordinate with other parties to minimise disruption to services and down time 1.8 Segregate incoming and outgoing cables to facilitate access and avoid overlaying and backtracking of cable 1.9 Notify stakeholders of proposed cutover details and proposed disruption to services 1.10 Undertake additional preparatory non-jointing work, as required, according to client practices and site conditions
2. Install required cable and termination modules	2.1 Follow WHS and environmental requirements for given work 2.2 Evaluate existing termination module type and capacity 2.3 Install additional termination modules, if required, and modify existing housing capacity according to manufacturer's specifications and industry practice 2.4 Determine cable route between the parent jointing chamber and the cable termination blocks to comply with client practices, site limitations, equipment specifications and regulations 2.5 Select entry port and sealing arrangements 2.6 Install cable to cabinet 2.7 Arrange and distribute cable fan out and routing according to industry practice
3. Joint, jumpering and cutover cable	3.1 Joint cable according to jointing standards, materials, joint type, location, client practices and manufacturer's guidelines 3.2 Install jumpers and cut away tails to industry practice and to minimise service outages 3.3 Test cable for performance and rectify any faults relating to cutover according to location, materials available and industry practice 3.4 Seal all joints and cabinet according to cable type, location, client practices and manufacturer's guidelines
4. Perform tests	4.1 Visually check that all connections and interconnections are firm and sound 4.2 Electrically test all terminations for continuity according to client

ELEMENT	PERFORMANCE CRITERIA
	practices 4.3 Reseal and pressurise cables
5. Complete site restoration and project documentation	5.1 Supply test results to the client for future reference 5.2 Complete cut over report and design amendments report (As Built) to show final cable layout 5.3 Recover obsolete materials and return to appropriate point for disposal 5.4 Restore site according to client practices or approving authority requirements 5.5 Notify appropriate personnel about completion of cutover and obtain sign off

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	1.1, 1.2, 1.4, 1.7, 1.9, 2.3, 3.3, 3.4, 4.2	- Interprets plans, specifications and other documentation from various sources - Consolidates information to determine requirements
Writing	1.1, 1.2, 1.3, 1.4, 1.7, 1.9, 2.3, 3.1, 3.2, 3.3, 4.2, 5.2	- Documents outcomes and changes to plans using industry relevant terminology and recognised plan symbols - Prepares documentation and correspondence using clear language and correct spelling
Oral Communication	1.2, 1.3, 1.4, 1.7, 1.9, 3.3, 5.5	Interacts effectively in verbal exchanges using appropriate language, listening and questioning skills to convey and clarify information
Numeracy	1.2, 1.5, 2.2, 2.3, 2.4, 2.7, 3.1, 3.2, 3.3, 4.2, 4.3, 5.2	- Makes calculations required for measuring and estimating materials for construction - Performs mathematical calculations to check, interpret and confirm results of system tests
Navigate the world of work	1.1, 1.3, 1.4, 1.10, 2.1, 2.3, 2.4, 2.7, 3.1, 3.2, 3.3, 3.4, 4.2, 4.3, 5.3, 5.4	Complies with policies, procedures and legislative requirements relevant to own role

Interact with others	1.2, 1.3, 1.4, 1.7, 1.9, 3.3, 5.5	• Uses appropriate practices and protocols to communicate effectively with co-workers, clients and others
Get the work done	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.9, 1.10, 2.2, 2.3, 2.4, 2.7, 3.1, 3.2, 3.3, 3.4, 5.1, 5.5	• Plans, sequences and carries out tasks according to meet required outcomes • Analyses task requirements to decide on appropriate equipment and practices • Uses problem solving processes to address less predictable problems, referring to standard procedures to determine solutions

Unit Mapping Information

Code and title Current version	Code and title Previous version	Comments	Equivalence status
ICTCBL318 Install and cut over metallic conductor cable to access network cabinet	Not applicable	New unit written to meet industry identified skills shortage.	No 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 ICTCBL318 Install and cut over metallic conductor cable to access network cabinet

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Performance Evidence

Evidence of the ability to:

- interpret project plan to determine cable route, required plant, tools, safety equipment and materials
- communicate with other stakeholders to arrange site access and safety requirements
- prepare cabinet and cable for cable entry according to client practices
- install cable, label and fan out for termination
- install termination modules
- coordinate with other parties to minimise service outages
- terminate pairs to termination modules following client practices
- run jumpers and cutover services with minimum outages
- conduct tests and rectify faults caused by cutover
- recover obsolete materials and restore site
- complete required documentation related to cut over
- comply with all related health and safety requirements.

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:

- list and describe cabling types, connectors and cabling structures
- outline the requirements of the legislation, codes of practice and other formal agreements that impact on the work activity
- describe the manufacturer's requirements for the operation of jointing equipment
- summarise the process for the cut over of a cabinet entry cable
- specify the health and safety requirements relating to the activity and site conditions

- describe the features and operating conditions of test equipment and how the equipment is used to measure cable performance
- identify typical issues and challenges that may cause delays in project construction activities, and how these could be addressed
- describe the purpose of warranties and service level agreements (SLAs).

Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and are or replicate the workplace. Traffic and pedestrian control, noise levels, production flow, interruptions and time variances must be typical of those experienced in the telecommunications – cabling field of work and include access to:

- systems and equipment used for cut over
- installation equipment currently used in industry
- regulatory and equipment documentation that impacts on work activities.

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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