



Australian Government

ICTCBL336 Install and cut over metallic conductor cable to access network cabinet

Release: 1

ICTCBL336 Install and cut over metallic conductor cable to access network cabinet

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 install and cut over 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 lines workers, field officers or technicians working for carriers, contractors or other service providers who install and rearrange copper cables in the carrier network.

Licensing, legislative, regulatory and certification requirements apply to telecommunications systems. Work functions in the occupational areas where this unit may be used are subject to regulatory requirements. Refer to the ICT Information and Communications Technology Training Package Companion Volume Implementation Guide 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 project plan to scope work and gain approval from customer on key features of installation 1.2 Arrange access to site according to required enterprise procedure 1.3 Inspect site to develop work health and safety (WHS) plan and notify appropriate personnel of identified safety hazards 1.4 Determine cable route and type of network cable equipment from

ELEMENT	PERFORMANCE CRITERIA
	project plan, considering the location of other services 1.5 Obtain required plant, tools, safety equipment and materials for cabinet entry 1.6 Coordinate with other parties to minimise disruption to services and down time 1.7 Segregate incoming and outgoing cables to facilitate access and avoid overlaying and backtracking of cable 1.8 Notify stakeholders of proposed cut over details and proposed disruption to services 1.9 Undertake additional preparatory non-jointing work, as required, according to customer practices and site conditions
2. Install required cable and termination modules	2.1 Evaluate existing termination module type and capacity 2.2 Install additional termination modules, as required, and modify existing housing capacity according to manufacturer specifications and industry practice 2.3 Determine cable route between parent jointing chamber and cable termination blocks according to customer practices, site limitations, equipment specifications and regulations 2.4 Select entry port and sealing arrangements 2.5 Install cable to cabinet 2.6 Arrange and distribute cable fan out and routing according to industry practice 2.7 Label cabinets, cables and joints according to industry standards
3. Joint, jumper and cut over cable	3.1 Joint cable according to jointing standards, materials, joint type, location, customer practices and manufacturer guidelines 3.2 Install jumpers and cut away tails according to industry practice and to minimise service outages 3.3 Test cable for performance and rectify faults relating to cut over according to location, materials available and industry practice 3.4 Seal all joints and cabinet according to cable type, location, customer practices and manufacturer 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 customer practices 4.3 Reseal and pressurise cables

ELEMENT	PERFORMANCE CRITERIA
5. Complete site restoration and project documentation	5.1 Supply test results to customer for future reference 5.2 Complete cut over report and design amendments report that shows final cable layout as part of as-built documentation 5.3 Recover obsolete materials and return to appropriate point for disposal 5.4 Restore site according to customer practices or approving authority requirements 5.5 Notify appropriate personnel about completion of cut over and obtain sign-off

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	- Interprets plans, specifications and other documentation from various sources - Consolidates information to determine requirements
Writing	- 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	Interacts effectively in verbal exchanges using appropriate language, listening and questioning skills to convey and clarify information
Numeracy	- 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	Complies with policies, procedures and legislative requirements relevant to own role
Interact with others	Uses appropriate practices and protocols to communicate effectively with co-workers, customers and others
Get the work done	- Plans, sequences and carries out tasks according to meet required outcomes - Analyses task requirements to select appropriate equipment and practices

Skill	Description
	• Uses problem solving processes and standard procedures to determine solutions to less predictable problems

Unit Mapping Information

ICTCBL336 Install and cut over metallic conductor cable to access network cabinet supersedes and is equivalent to ICTCBL318 Install and cut over metallic conductor cable to access network cabinet.

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 ICTCBL336 Install and cut over metallic conductor cable to access network cabinet

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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:

- interpret project plan to determine cable route, required plant, tools, safety equipment and materials
- communicate with other stakeholders to arrange site access and to confirm safety requirements
- prepare cabinet and cable for cable entry according to customer practices
- install cable, label and fan out for termination
- terminate pairs to termination modules following customer practices
- run jumpers and cut over services with minimum outages
- complete required documentation related to cut over
- follow and comply with WHS and environmental requirements.

Note: Evidence must be provided at least once when a specific volume or frequency is not stated.

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:

- cabling types, connectors and cabling structures
- legislation, regulations, codes, standards and other formal agreements that impact on the work activity, in particular:
 - health, safety and environmental requirements relating to the activity and site conditions
- manufacturer requirements for the operation of jointing equipment
- process for the cut over of a cabinet entry cable
- features and operating conditions of test equipment and how the equipment is used to measure cable performance

- typical worksite issues and challenges that may cause delays in project construction activities, and how these could be addressed
- purpose of warranties and service level agreements (SLAs).
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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:

- 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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