



Australian Government

ICTCBL320 Jumper metallic conductor cable in the access network

Release: 1

ICTCBL320 Jumper metallic conductor cable in the access network

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 jumper metallic conductor cable in access network cabinets or exchange distribution frames. It applies to new or existing jumpering for upgrades or network cabling rearrangements for convergence to next generation networks (NGN).

It applies to linesworkers, technicians or jointers who carry out technical roles involving indoor and outdoor distribution frame jumpering. All jumpering in access network distribution cabinets must be conducted by workers who have been authorised by the network owner or carrier to undertake the work involved.

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 cabinet and termination frame for jumpering	1.1 Arrange access according to customer and individual worksite requirements 1.2 Set up work site to ensure public safety and to comply with utility provider, local, state and commonwealth requirements 1.3 Inspect site to develop work health and safety (WHS) plan and

ELEMENT	PERFORMANCE CRITERIA
	notify appropriate personnel of identified safety hazards 1.4 Prepare for cable jumpering work observing client practices, cable type, termination systems, earthing and protection and relevant legislative requirements 1.5 Select correct jumpering activities for installation according to client practices 1.6 Identify remote power feeding services that operate at above telecommunications network voltage (TNV) and special services that terminate in the cabinet of housing 1.7 Take necessary precautions to work safely with network voltages and minimise service disruption to special services 1.8 Remove all contaminants from worksite that may adversely affect jumpering and prepare worksite to ensure adequate visibility to minimise errors and reduce eye strain 1.9 Plan block locations following client practices within the frame and allow for capacity to expand jumpering where possible
2. Jumper terminal blocks on frame	2.1 Install terminating modules to frame according to manufacturer's specifications 2.2 Set up jumpering reel near source terminal block and draw jumper through frame 2.3 Terminate jumper to block and return, cut and terminate source end of jumper 2.4 Identify and label jumpers according to client practices 2.5 Install over-voltage protection devices to all cables with metallic component where required 2.6 Earth cable shield to manufacturer's specifications and industry standards
3. Test jumpering and seal closure	3.1 Conduct visual inspection to confirm that jumper is not kinked or jammed 3.2 Test termination to satisfy performance specifications and record results if required 3.3 Close housing, seal and re-pressurise where necessary
4. Complete records and restore site	4.1 Update records and plans accurately with cabling details according to industry codes of practice and current Australian standards 4.2 Remove installation waste and debris from worksite and dispose of according to environmental requirements to maintain safe worksite conditions

ELEMENT	PERFORMANCE CRITERIA
	4.3 Notify appropriate personnel about completion of job 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, 1.4, 2.1, 2.4, 2.6, 3.2, 4.1	Interprets textual information from relevant sources to identify relevant and key information
Writing	1.3, 2.4, 3.2, 4.1, 4.3	Uses clear, specific and industry related terminology to complete workplace documentation
Oral communication	1.1, 1.3, 4.3	Interacts effectively in verbal exchanges using appropriate language, listening and questioning skills to convey and clarify information
Numeracy	1.4, 1.6, 2.1, 2.6, 3.2, 4.1	Takes readings and measurements and interprets results
Navigate the world of work	1.1, 1.2, 1.3, 1.4, 1.7, 1.8, 2.5, 2.6, 4.1, 4.2	Complies with policies, procedures and legislative requirements relevant to own role
Interact with others	1.1, 1.3, 4.3	Identifies and follows accepted communication practices and protocols when liaising with clients, colleagues and others
Get the work done	1.1, 1.4, 1.5, 1.6, 1.9, 2.1, 3.1, 3.2, 4.1, 4.3	- Plans, sequences and carries out tasks to meet required outcomes - Analyses task requirements to decide on appropriate equipment and practices

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTCBL320 Jumper metallic conductor cable in the access	Not applicable	New unit to address industry skill needs.	No equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
network			

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 ICTCBL320 Jumper metallic conductor cable in the access network

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Performance Evidence

Evidence of the ability to:

- plan and prepare for jumpering activity including:
 - arranging safe access to site
 - identifying special services and remote power feeds a
 - following appropriate procedures
- carry out jumpering activity including:
 - populate terminal frames with new terminal blocks where necessary
 - running jumpers through frame and terminate jumper to terminal blocks
 - using correct methods to terminate a range of jumpers
 - conducting tests and interpreting cable test results for several different types of lead-in faults
 - interpreting and applying relevant legislative requirements
- finalise jumpering activity including:
 - updating records and plans to show cable locations
 - restoring site to required condition
 - obtaining final sign off.

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 the termination tools required for the work activity and explain how to operate them according to safety and manufacturer's guidelines
- describe the features and operating requirements of testing equipment

- describe the process used to install and maintain cabling products according to manufacturer's guidelines
- outline legislation, codes of practice and other formal agreements that impact on the work activity
- describe specific work health and safety requirements relating to the activity and site conditions
- explain termination methods and performance requirements for jumpering activity
- describe typical issues and challenges that occur on site and how to address them.

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 must be typical of those experienced in the telecommunications – cabling field of work and include access to:

- sites where metallic conductor cable may be terminated
- colour codes for visual inspections or wire-mappers for 4 pair cable tests
- regulatory and cabling documentation that impacts on cable terminating activities.

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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