



Australian Government

ICTCBL220 Install a cable lead-in

Release: 1

ICTCBL220 Install a cable lead-in

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 skills and knowledge required to install indoor and outdoor aerial and underground lead-ins for client installations of a new metallic or optical cable installation, or upgrade for an existing network or subsystem, or cabling infrastructure for convergence to next generation networks (NGN) digital reception and broadband.

It applies to technical staff who haul underground or fix aerial cable lead-in. They may make use of tension meters and hauling equipment. It can be applied to new installations and upgrades of telecommunications cabling projects in domestic, commercial and industrial installations.

Work functions in the occupational areas where this unit may be used are subject to regulatory requirements. Refer to the ICT Implementation Guide Companion Volume or the relevant regulator for details of licensing, legislative or certification 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 cable installation	1.1 Prepare for given work according to industry standards 1.2 Arrange access to site according to required procedure 1.3 Inform appropriate personnel of identified hazards and safety constraints on worksite 1.4 Obtain cable installation plan and set up installation equipment according to manufacturer's requirements

ELEMENT	PERFORMANCE CRITERIA
	1.5 Select suitable protective clothing, tools and equipment, and safety equipment, and confirm support structures are safe
2 Install aerial cable lead-in	2.1 Identify and use safe support structures 2.2 Select type of cable bearer and determine need for separate catenary wire installation 2.3 Secure catenary wire or bearer wire permanently to support structure using aerial fixing devices, and adjust tension to meet relevant height and minimum sag requirements to required specifications 2.4 Secure cable safely to catenary wire, leaving cable loop on support structure 2.5 Terminate cable in client enclosure and aerial enclosure
3 Install underground cable lead-in	3.1 Run push rod through pipe and attach cable for hauling 3.2 Haul cable using lubricant, cable slippers or rollers to ensure no sheath damage when hauling at correct tension into and out of enclosures 3.3 Provide sufficient cable allowance in enclosures for jointing and maintenance requirements 3.4 Terminate cable in client enclosure and pit enclosure
4 Seal and secure cable	4.1 Seal cable ends to prevent ingress of foreign material 4.2 Secure cable loop on support structure to minimise damage to conductors 4.3 Weather seal building entry points where appropriate 4.4 Fit over voltage protection devices to all cables with metallic component where required
5 Complete tasks on site	5.1 Record any approved alteration to original design and return to appropriate personnel 5.2 Complete appropriate records and sign reports where required according to enterprise policy 5.3 Restore site to original condition and dispose of waste in environmentally safe manner 5.4 Notify client 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	1.4, 2.3, 5.1, 5.2, 5.4	Uses a range of strategies to facilitate comprehension
Writing	5.1, 5.2	Completes records according to organisational requirements
Oral Communication	1.3, 5.1, 5.4	Use language and non-verbal features appropriate to context
Numeracy	2.3	Interprets and comprehends a range of everyday mathematical information that is embedded in familiar and routine texts
Navigate the world of work	1.1-1.3, 1.5, 2.1, 2.3, 5.3	Takes personal responsibility for adherence to legal and regulatory responsibilities relevant to own work context, and draws attention to any issues that may affect self or others
Get the work done	1.1, 1.4, 2.2-2.5, 3.1-3.2, 3.4, 4.1-4.4	- Implements actions as per plan, making slight adjustments if necessary, and addressing some unexpected issues - Automatically implements standard procedures for routine decisions in response to familiar problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
ICTCBL220 Install a cable lead-in	ICTCBL2163A Install a cable lead-in	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 ICTCBL220 Install a cable lead-in

Modification History

Release	Comments
Release 1	This version first released with ICT Information and Communications Technology Training Package Version 2.0.

Performance Evidence

Evidence of the ability to:

- install at least one type of aerial cable and one type of underground cable, including placing and securing cables on support structures and building faces for both internal and external locations
- haul, secure and seal cables
- perform visual inspection to identify safe support structures from pole status markings
- terminate cables at the client and network ends of aerial and underground installations
- complete and provide a report documenting the installation and test results to client
- comply with all related work health and safety (WHS) requirements and work practices.

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:

- identify the features and operating requirements of testing equipment
- identify and apply industry standards and codes of practice for cabling
- identify common types of cable used in telecommunications
- identify and describe manufacturer's requirements for selection and safe operation of tools and equipment
- identify workplace procedures reflecting the requirements of legislation, codes of practice and other formal agreements that impact on the work activity
- identify specific WHS hazards and safety requirements relating to the activity and site conditions
- list and describe the safety equipment, both personal and worksite related, required for safe work practices
- describe the issues relating to the safe use of support structures
- identify the appropriate fixing devices used in cable lead-in work
- describe termination methods and performance requirements

- identify typical issues and challenges that occur on site
- identify and explain the purpose of appropriate records and documentation required for work activity.

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 – cabling field of work and include access to:

- special purpose tools, equipment and materials
- sites where aerial and underground cable lead-ins may be conducted
- equipment and personal protective equipment currently used in industry
- testing equipment currently used in industry
- relevant 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.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>