



**Australian Government**

# **ICTCBL208 Splice and terminate optical fibre cable for carriers and service providers**

**Release: 1**

# ICTCBL208 Splice and terminate optical fibre cable for carriers and service providers

## 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 the skills and knowledge required to splice and terminate optical fibre cable within an optical telecommunications transmission environment for new installations or upgrades of an optical backbone or access network, to achieve greater bandwidth and capacity required by emerging technology convergence for next generation networks (NGN).

It applies to technical staff who splice and terminate optical fibre cable for telecommunications projects for commercial or industrial fibre to the premises (FTTP) non-mechanical splicing installations.

All client cabling work in the telecommunications, fire, security and data industries must be performed by a registered cabler. All cablers are required to register with an Australian Communications and Media Authority (ACMA) accredited registrar.

## 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 splicing	1.1 Select safety equipment to protect self and public according to enterprise guidelines and work health and safety (WHS) practices 1.2 Confirm layout of installation according to physical conditions at site and relevant legislation, codes, regulations and standards 1.3 Inform appropriate personnel of identified hazards on worksite 1.4 Locate other services from relevant authorities according to enterprise guidelines and safe practices

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	<p>1.5 Test for dangerous gases and place guards around open manholes following WHS and environmental requirements</p> <p>1.6 Obtain approval for alterations to design according to enterprise guidelines</p>
2. Check existing optical fibre cable	<p>2.1 Verify that cable was installed according to installation plan and visually inspect cable for signs of sheath damage</p> <p>2.2 Maintain minimum bend ratios according to manufacturer's specifications to prevent cable damage and signal degradation</p> <p>2.3 Secure cable according to safe industry practice to avoid cable and sheath damage</p>
3. Splice optical fibre cable	<p>3.1 Verify fibre is not live using appropriate equipment to maintain safe working practice and ensure correct fibre has been identified</p> <p>3.2 Prepare cable end to expose optical fibres according to splicing method and manufacturer's specifications</p> <p>3.3 Prepare and splice fibres using safe industry practice according to enterprise specifications</p> <p>3.4 Test splice joint to manufacturer's and design requirements</p>
4. Terminate optical fibre cable	<p>4.1 Select connector unit to suit terminating frame according to design specifications</p> <p>4.2 Terminate cable using type of termination specified in plan and according to manufacturer's specifications</p> <p>4.3 Test termination for transmission loss and strength, and re-terminate if transmission loss exceeds manufacturer's specifications</p> <p>4.4 Install protection devices on connectors to protect from exposure and contaminants</p> <p>4.5 Label and lay up cables in enclosure according to manufacturer's instructions and enterprise guidelines</p>
5. Finish job and report	<p>5.1 Remove waste and reinstate site according to enterprise guidelines</p> <p>5.2 Prepare reports, including test results and alterations to plans, according to enterprise policy</p> <p>5.3 Notify appropriate personnel of work completion and obtain sign off</p>

## Foundation Skills

*This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.*

<b>Skill</b>	<b>Performance Criteria</b>	<b>Description</b>
Reading	1.1, 1.4, 2.1, 2.2, 3.2, 3.4, 4.1, 4.2, 4.5, 5.2, 5.3	<ul style="list-style-type: none"> <li>Understands familiar texts of limited complexity that may incorporate graphs, tables and charts</li> <li>Recognises the structures and distinguishing features of a range of familiar text types</li> </ul>
Writing	1.3, 1.4, 1.6, 5.2, 5.3	<ul style="list-style-type: none"> <li>Interrelates ideas and information and some support material when writing about familiar topics</li> </ul>
Oral Communication	1.3, 1.4, 1.6, 5.3	<ul style="list-style-type: none"> <li>Demonstrates an awareness of the need to vary structure, style, tone and vocabulary to meet the requirements of the audience, context and purpose</li> </ul>
Numeracy	2.2	<ul style="list-style-type: none"> <li>Interprets and comprehends whole numbers and familiar or routine fractions, decimals and percentages</li> </ul>
Navigate the world of work	1.1, 1.5, 2.1, 2.3, 3.1-3.4, 4.1-4.3, 4.5, 5.1-5.3	<ul style="list-style-type: none"> <li>Takes responsibility for decisions about when and how to complete tasks and coordinate with others</li> <li>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</li> </ul>
Get the work done	1.5, 1.6, 2.2, 3.1, 3.3, 3.4, 4.1-4.5, 5.1	<ul style="list-style-type: none"> <li>Implements actions as per plan, making slight adjustments if necessary, and addressing some unexpected issues</li> <li>Initiates standard procedures when responding to familiar problems within immediate context</li> </ul>

## Unit Mapping Information

<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
ICTCBL208 Splice and terminate optical fibre cable for carriers and service providers	ICTCBL2065B Splice and terminate optical fibre cable for carriers and service providers	Updated to meet Standards for Training Packages  Performance Criteria	Equivalent unit

<b>Code and title current version</b>	<b>Code and title previous version</b>	<b>Comments</b>	<b>Equivalence status</b>
		clarified	

## **Links**

Companion Volume implementation guides are found in VETNet -

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