

# ICTTEN316 Conduct basic tests and analyses of telecommunications copper cabling

Release: 1

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# **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 test and analyse telecommunications copper cabling using a variety of telecommunications industry test equipment.

This unit applies to technicians who conduct basic tests and telecommunications copper cabling analysis.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

#### **Unit Sector**

Telecommunications - Telecommunications Network Engineering

#### **Elements and Performance Criteria**

| ELEMENT                                              | PERFORMANCE CRITERIA                                                                                       |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| Elements describe the essential outcomes.            | Performance criteria describe the performance needed to demonstrate achievement of the element.            |
| 1. Determine cable type/s and applications in use in | 1.1 Identify and document applications in use in telecommunications system according to relevant standards |
| telecommunications<br>system                         | 1.2 Identify cables in use within a telecommunications system according to relevant standards              |
|                                                      | 1.3 Assess balanced/unbalanced nature of type of cable system in use                                       |
| 2. Determine testing parameters and calibrate        | 2.1 Select most appropriate testing device and methodology for cable type                                  |
| devices                                              | 2.2 Outline testing parameters to be used for task                                                         |
|                                                      | 2.3 Locate and isolate alternative energy supply sources                                                   |

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| ELEMENT                   | PERFORMANCE CRITERIA                                                                                         |
|---------------------------|--------------------------------------------------------------------------------------------------------------|
|                           | 2.4 Determine components to be tested                                                                        |
|                           | 2.5 Resolve implications of system interruptions and methods for live testing with minimum system disruption |
|                           | 2.6 Calibrate test devices according to manufacturer and enterprise requirements                             |
| 3. Conduct copper cable   | 3.1 Connect test devices to cable system                                                                     |
| test/s and record results | 3.2 Perform and record test results                                                                          |
|                           | 3.3 Save and retrieve test results as required                                                               |
|                           | 3.4 Review adverse findings and escalate according to enterprise policy and procedures                       |
| 4. Report test results    | 4.1 Analyse and record critical test data                                                                    |
|                           | 4.2 Develop recommendations based on test data analysis                                                      |
|                           | 4.3 Write up report of test results                                                                          |
|                           | 4.4 Submit report to customer 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                                                                                                                                                                                                                                                                    |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Learning              | Identifies, plans and implements strategies using knowledge attained                                                                                                                                                                                                           |
| Reading               | Analyses and consolidates information and data from sources, against defined criteria and requirements, and checks for accuracy and completeness                                                                                                                               |
|                       | Recognises and interprets textual information to determine specific information about security incidents                                                                                                                                                                       |
| Writing               | Develops material for a specific audience, using clear and detailed language in order to convey explicit information                                                                                                                                                           |
| Oral<br>Communication | <ul> <li>Articulates information clearly, using specific and relevant language suitable to audience to convey recommendations and provide verbal reports</li> <li>Uses listening and questioning techniques to confirm understanding of WHS and operational testing</li> </ul> |
| Numeracy              | Extracts and evaluates the mathematical information embedded in a range of technical specifications and manuals                                                                                                                                                                |

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| Skill                      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Navigate the world of work | <ul> <li>Accepts responsibility and ownership for the task and makes decisions on completion parameters and the need for coordination with others</li> <li>Takes personal responsibility for following explicit and implicit policies, procedures and legislative requirements</li> </ul>                                                                                                                                                                                                                  |
| Interact with others       | <ul> <li>Selects form, channel and mode of communication for a specific purpose relevant to own role</li> <li>Ensures stakeholders are aware of WHS identified risks for task</li> </ul>                                                                                                                                                                                                                                                                                                                   |
| Get the work done          | <ul> <li>Plans strategic priorities and outcomes within a flexible, efficient and effective context, in a diverse environment exposed to competing demands</li> <li>Gathers and analyses data, and seeks feedback, to improve plans and processes</li> <li>Makes decisions in a complex and diverse environment, using input from a range of sources</li> <li>Explores and incubates new ideas through unconstrained analysis and critical thinking, to develop and improve enterprise controls</li> </ul> |

# **Unit Mapping Information**

No equivalent unit. New unit.

#### Links

 $\label{lem:companion} Companion \ \ Volume \ \ Implementation \ \ Guides \ are available \ \ from \ \ VETNet-https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2$ 

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