



Australian Government

**Assessment Requirements for
UETTD RIS81 Install telecommunications
infrastructure on electricity supply industry
assets**

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the UET Transmission, Distribution and Rail Sector Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including the use of risk control measures
- applying sustainable energy principles and practices
- installing telecommunications infrastructure on electricity supply industry assets using any two (2) of the following:
 - cable support
 - support brackets
 - junction boxes
 - enclosures
- using any two (2) of the following:
 - ribbon optical fibre cable
 - single mode optical fibre cable
 - multi-mode optical fibre cable
 - structured aerial cabling
- dealing with unplanned events on at least one (1) occasion.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- telecommunication network drawings and plans
- WHS/OHS specific requirements for telecommunication networks encompassing:
 - aerial safety equipment
 - procedures to applying pole top rescue
- hazard identification associated with telecommunication networks equipment encompassing:
 - working at heights

- checking exposed metal for potential differences
- hazard and control measures in aerial cabling working environment
- soundness of pole for aerial cabling
- hazards associated with working with optical fibre
- aerial construction methods and regulations
- telecommunication network cables encompassing:
 - types of cables
 - cable colour coding for outdoor cable
 - colour coding of cables and termination modules and standard connectors used with twisted pair, optical fibre and coaxial cables
 - cable labelling devices
- cables protect and support requirements encompassing:
 - protection against mechanical damage
 - protection from adverse temperatures and corrosion protection from magnetic field that may affect the performance of the cable
 - cable support and protection devices, accessories and typical applications (metallic and non-metallic conduits, duct and trunking, cable ladder and tray, cable clips and ties and related accessories)
- installation techniques encompassing:
 - cable installation equipment
 - cable drawing and hauling techniques
- insulation removal and replacement
- conductor handling and cable terminations encompassing:
 - application of connecting devices for conductors and terminals
 - stress release on cables/conductors
 - methods of terminating cables (cables less than twenty pair, twenty pair cable and greater)
 - joining of aerial cables
- operating principles of fibre optic cable transmission encompassing:
 - types of optical fibre types available for telecommunications voice and data transmission
 - difference between multi-mode and single mode transmission
 - advantages of optical fibre cable compared to other cables
 - applications of optical fibre cables
 - requirements of optical fibre cables as specified in current standards
- installation techniques for optical fibre cables encompassing:
 - regulations, standards and codes applicable to optical fibre installation
 - bending radii and hauling requirements
 - cable support and securing mechanisms
 - safety precautions.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated conditions involving realistic and authentic activities that replicate operational workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment (PPE) currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

UET Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=229bace1-b7bc-4653-9300-dffb13ecfad7>