



Australian Government

**Assessment Requirements for
UETTDRIS54 Install and maintain poles,
structures and overhead conductors and
cables**

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 and maintaining poles, structures and overhead conductors and cables using at least two (2) of the following:
 - copper
 - aluminium
 - steel
 - low voltage (LV) aerial bundled cable (ABC)
 - aluminium/steel reinforced
 - high voltage (HV) ABC
 - HV insulated unscreened conductor (IUC)
 - pilot
- using at least two (2) of the following height access methods:
 - elevated work platform (EWP)
 - portable platform
 - ladder
- using at least three (3) of the following types of stringing equipment:
 - tension equipment*
 - cable drum stands
 - cable trailers
 - ropes
 - rollers
 - sheaves
 - stockings
 - stringing equipment
 - swivels

- winches
- (* must do one)
- using at least two (2) of the following types of testing and recording equipment:
 - voltage indicators *
 - phasing sticks
 - fault indicators
 - field intensity meter
 - operating rods
 - (*must do)
- using at least one (1) of the following types of stringing methods:
 - lay-out (stringing method)
 - pull through (stringing method)
 - pilot rope (stringing method)
- using at least one (1) of the following tensioning methods:
 - dynamometer
 - site board
 - beat (wave sagging)
 - abney level
 - theodolite
- 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:

- standards, codes, legislation, supply authority regulations and/or enterprise requirements applicable to installing conductors and associated equipment
- safe work practices, including:
 - requirements to enable safe working on conductive poles
 - procedures to attach on site earthing devices to de-energised LV and HV circuits
- requirements for the use of overhead line construction manuals, system diagrams/plans and drawings, including:
 - material lists
 - conductor size, type and route length
- constructions types and structures for distribution and sub-transmission lines
- types, sizes and characterises of overhead conductors
- resources for the stringing and maintenance of conductors, including:
 - types of LV and HV overhead electrical conductor connections
 - causes and effects of poor electrical connections
 - reasons for and methods used to maintain standard phase sequencing

- removing, repairing and replacing damaged conductors
- minimum clearances between overhead conductors and LV and HV structures
- techniques for conductor installation, including:
 - types and application of tools, equipment and hardware
 - methods of stringing, tensioning and termination of LV and HV conductors.

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, facilities, equipment and personal protective equipment (PPE) currently used in industry for installing and maintaining poles, structures and overhead conductors and cables
- applicable documentation, including workplace procedures, relevant industry standards, 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>