



Australian Government

UEERS0007 Install and maintain non-vital screen-based control systems

Release: 1

UEERS0007 Install and maintain non-vital screen-based control systems

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Application

This unit involves the skills and knowledge required to install/maintain non-vital indication screen-based control systems on rail networks.

It includes preparing and installing/maintaining non-vital screen-based control systems. It also includes completing installation/maintenance of non-vital screen-based control systems.

Persons achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and to comply with relevant codes of practice, rules and/or guidelines.

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

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

Competency Field

Rail Signalling

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare to install/ non-vital screen-based

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures

control systems	for a given work area are identified, obtained and understood
1.2	Hazards are identified, WHS/OHS risk are assessed, and control measures and workplace procedures are followed in preparation for the work
1.3	Scope of maintenance is determined from maintenance schedules, job specifications, drawings and regulatory requirements
1.4	Appropriate rail safe working person/s is consulted to ensure work is coordinated effectively with others involved on the worksite
1.5	Materials needed for installation/maintenance work are obtained in accordance with workplace procedures and checked against job specifications
1.6	Tools, equipment and testing devices needed to install/maintain work are obtained in accordance with workplace procedures and checked for correct operation and safety
2 Install/maintain non-vital screen-based control systems	2.1 WHS/OHS risk control measures and workplace procedures for installation/maintenance of non-vital screen-based control systems are followed
	2.2 Non-vital screen-based control systems are installed/maintained to comply with technical industry standards, job specifications and requirements
	2.3 Control system fault-finding and repairs are performed efficiently, without waste of materials, damage to apparatus, the surrounding environment or services using sustainable energy practices
	2.4 Control system faults are verified using relevant technical industry standard information, fault-finding and diagnostic techniques to identify faulty control equipment
	2.5 Faulty modules are replaced, adjusted and secured in accordance with manufacturer specifications and workplace procedures
	2.6 Methods for dealing with unplanned situations/events are selected on the basis of safety and specified work outcomes

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| 3 Complete non-vital screen-based control system installation/maintenance | 3.1 WHS/OHS risk control measures and workplace procedures for carrying out work are followed |
| | 3.2 Control equipment is inspected, adjusted and tested using workplace test procedures and equipment to ensure system operates within specified technical industry standards |
| | 3.3 Control system faults identified beyond the scope of first level maintenance are reported for follow-up action in accordance with workplace procedures |
| | 3.4 Inspection and test results are documented in accordance with workplace procedures and, as required, faulty and/or replaced module/s are tagged with relevant reports |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEENEEN106A Install and maintain non-vital screen based control systems.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>

Assessment Requirements for UEERS0007 Install and maintain non-vital screen-based control systems

Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology 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:

- reading and interpreting specifications correctly
- installing/maintaining non-vital screen-based control systems to meet operational and technical standards
- using effective fault diagnosis and repair/replacement techniques to a specified level
- confirming equipment operates within specified technical parameters
- using testing equipment, instruments and tools correctly
- following relevant codes of practice, environmental protection procedures and requirements
- completing relevant technical reports, records and documentation
- dealing with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - implementing workplace procedures and practices
 - using risk control measures
- applying safe working practices and relevant industry standards, codes of practice and rail safety regulations
- applying sustainable energy principles and practices
- planning to install/maintain non-vital screen-based control systems.

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:

- non-vital screen-based rail control system installation and maintenance, safe working practices and relevant standards, codes and regulations, including rail signalling and non-vital computer applications
- equipment and their components encompassing:
 - visual display
 - non-vital software

- operating principles and parameters encompassing:
 - normal mode operation via indications
 - failure mode via fault reports and indications
- servicing procedures encompassing:
 - maintenance documentation
 - coordination/planning sequence
 - operational test procedures
 - scheduled/preventative maintenance
 - unscheduled/corrective maintenance
 - rail signalling and computer peripheral application
- equipment and their components encompassing:
 - visual display units
 - keyboards
 - front end processors
 - printers
- operating principles and parameters encompassing:
 - normal mode operation via indications
 - failure mode via fault reports and indications
- servicing procedures encompassing:
 - maintenance documentation
 - operational test procedures
 - scheduled/preventative maintenance
 - unscheduled/corrective maintenance
- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications
- relevant WHS/OHS legislated requirements
- relevant workplace policies and procedures
- safe working practices and relevant industry standards, codes of practice and rail safety regulations
- sustainable energy principles and practices.

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 suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in suitable simulated workplace operational situations that replicate 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
- resources that reflect current industry practices in relation to installing/maintaining non-vital screen-based control systems
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>