



Australian Government

UEERS0002 Decommission electrical and electromechanical rail signalling from service

Release: 1

UEERS0002 Decommission electrical and electromechanical rail signalling from service

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 decommission electrical and electromechanical rail signalling from service on rail networks.

It includes preparing to withdraw electrical and electromechanical rail signalling from service. It also includes completing disconnection of operating and redundant circuitry, equipment and components; testing of remaining circuitry and equipment; finding and repairing faults; testing of control and indicating equipment; and reporting.

Persons achieving competence in this unit will need to fulfil the applicable state/territory legislated rail safety requirements and 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

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

UEERS0008 Install and maintain non-vital telemetry systems

UEERS0004 Find and repair rail signalling system faults

Competency Field

Rail Signalling

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

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| <p>1 Prepare to decommission electrical and electromechanical rail signalling from service</p> | <p>1.1 Work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures for a given work area are identified, obtained and clarified</p> <p>1.2 Hazards are identified, WHS/OHS risks assessed, and control measures and workplace procedures implemented in preparation for work</p> <p>1.3 Scope of decommissioning is determined from job specifications, design drawings and regulatory requirements</p> <p>1.4 Appropriate safe working person/s is consulted to ensure work is coordinated effectively with others involved on the worksite</p> <p>1.5 Materials needed for the safe disconnection of circuits, equipment and components are obtained in accordance with workplace procedures and checked against job specifications</p> <p>1.6 Tools, equipment and testing devices needed to disconnect circuits, equipment and components are obtained in accordance with workplace procedures and checked for correct operation and safety</p> |
| <p>2 Withdraw electrical and electromechanical rail signalling from service</p> | <p>2.1 WHS/OHS risk control measures and workplace procedures for carrying out the work are followed</p> <p>2.2 On-track safe working requirements are complied with in accordance with relevant industry standards and network rules</p> <p>2.3 Inspection is carried out and circuits, equipment and components are checked to ensure they are in accordance with manufacturer and system specifications</p> <p>2.4 Disconnecting, isolating and removal of redundant wiring; the termination of altered wiring; and checking indicators and signal system operation are completed in accordance with network requirements and relevant industry standards</p> <p>2.5 Methods for dealing with unplanned situations are</p> |

- selected on the basis of safety and specified work outcomes
- 2.6 Decommissioning is performed efficiently, without waste of materials or damage to apparatus, the surrounding environment or services using sustainable energy practices
 - 2.7 System and design faults are verified using relevant, technical information, fault-finding and diagnostic techniques to identify faulty rail signalling equipment
 - 2.8 Faulty rail signalling equipment is replaced, adjusted and secured in accordance with manufacturer specifications and workplace procedures
 - 2.9 Control equipment is adjusted, inspected and tested using workplace test procedures and equipment to ensure it operates in accordance with specified industry technical standards
- 3 Complete decommissioning work and reports**
- 3.1 WHS/OHS work completion risk control measures and workplace procedures are followed
 - 3.2 System faults are identified and reported for follow-up action in accordance with workplace procedures
 - 3.3 Inspection and test results are documented in accordance with workplace procedures and faulty or replaced equipment is tagged and despatched to maintain equipment spares

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 UEENEEN127A Decommission electrical and electro-mechanical rail signalling from service.

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 UEERS0002 Decommission electrical and electromechanical rail signalling from service

Modification History

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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 one occasion and include:

- reading and interpreting specifications correctly
- disconnecting signalling circuits, equipment and components to meet operational and technical standards
- using effective fault diagnosis and repair/replacement techniques to specified model level
- confirming circuits, equipment and components operated within specified technical parameters
- testing equipment and instruments
- using tools correctly
- following relevant codes of practice, environmental protection procedures and requirements
- completing relevant technical reports, records and documentation
- dealing with unplanned events
- applying rail safe working practices and relevant industry standards, codes and rail safety regulations
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements, including:
 - implementing workplace procedures and practices
 - using risk control measures
- applying sustainable energy principles and practices
- decommissioning electrical and electromechanical rail signalling from service in accordance with workplace procedures
- preparing to decommission electrical and electromechanical rail signalling from service
- withdrawing electrical and electromechanical rail signalling from service.

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:

- electrical and electromechanical rail signalling decommissioning, safe working practices and relevant standards, codes and regulations, including:

- purpose of decommissioning
- decommissioning planning and documentation
- decommissioning requirements and hazards
- decommissioning procedures
- fault diagnosis and repair/replacement techniques
- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications
- relevant safe working practices, industry standards, codes of practice, regulations and WHS/OHS legislated requirements, including decommissioning requirements and hazards
- relevant workplace documentation.

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 rail workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in suitable rail 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 decommissioning electrical and electromechanical signalling from service
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

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