

# UETTDRDS49 Establish and manage power system geographical information systems data

Release: 1

# **UETTDRDS49** Establish and manage power system geographical information systems data

### **Modification History**

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

# **Application**

This unit covers the preparation and updating of detailed plans to be used during the construction phase of all design activities, and utilised by network owners as technical reference materials, to detail system infrastructure. It includes the use of geographical information systems (GIS).

The application of the skills and knowledge described in this unit may require a licence/registration to practice in the workplace subject to regulations for undertaking of electrical work.

Other conditions may apply under state and territory legislative and regulatory licencing requirements which must be confirmed prior to commencing this unit.

# Pre-requisite Unit

Common Unit Group

UEENEEE101A Apply Occupational Health and Safety regulations, codes and practices in the workplace

UEENEED104A Use engineering applications software on personal computers

UEENEE107A Use drawings, diagrams, schedules, standards, codes and specifications

UETTDREL16 Working safely near live electrical apparatus

UETTDRIS62 Implement and monitor the power system organisational OHS policies, procedures and programs

# **Competency Field**

Design

#### **Unit Sector**

Not applicable.

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

#### **ELEMENTS**

#### PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

- 1 Plan for and coordinate the establishment and management of GIS data
- 1.1 Work health and safety (WHS)/occupational health and safety (OHS) practices/procedures and environmental and sustainable energy procedures, which may influence the establishment and management of GIS, are reviewed and determined
- 1.2 Purpose of the GIS is established and expected outcomes of the work are confirmed with appropriate personnel
- 1.3 Organisational established procedures on policies and specifications for the GIS are obtained or established with appropriate personnel
- 1.4 Equipment/tools and personal protective equipment (PPE) are selected and coordinated based on specified requirements and established procedures
- 1.5 Work is prioritised and sequenced for the most efficient and effective outcome following consultation with others for completion within acceptable timeframes, to a quality standard and in accordance with established procedures
- **1.6** Risk control measures are identified, prioritised and evaluated against the work schedule
- 1.7 Relevant work permits are secured to coordinate the performance of work according to requirements and/or established procedures
- 1.8 Resources, including personnel, equipment, tools and PPE, required for the job are identified, scheduled and coordinated and confirmed safe and in technical working order
- 1.9 Liaison and communication issues with others/authorised personnel, authorities, clients and land owners are resolved and activities coordinated to carry out work
- **1.10** Personnel participating in the work, including plant operators and contractors, are fully briefed and

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- respective responsibilities coordinated and authorised, where applicable, in accordance with established procedures
- 2 Carry out and coordinate the establishment and management of GIS data
- 2.1 Circuit/systems modelling is used to evaluate alternative proposals in accordance with established procedures
- 2.2 WHS/OHS and sustainable energy principles, functionality and practices to reduce the incidents of accidents and minimise waste are incorporated into the project in accordance with requirements and/or established procedures
- 2.3 Decisions concerning the establishment and management of GIS are made on the basis of safety and effective outcomes according to requirements and/or established procedures
- 2.4 Mathematical/engineering models of the establishment and management of GIS are used to analyse the effectiveness of the finished project in accordance with requirements and established procedures
- 2.5 Technical advice is given to potential hazards, safety risks and control measures so that monitoring and preventative action can be undertaken and/or appropriate authorities consulted, where necessary, in accordance with requirements and established procedures
- 2.6 Essential knowledge and associated skills are applied to analyse specific data and compare it with compliance specifications to ensure completion of the project within an agreed timeframe according to requirements
- 2.7 Solutions to non-routine problems are identified and actioned using acquired essential knowledge and associated skills according to requirements
- **2.8** Quality of work is monitored against personal performance agreement and/or established organisational and professional standards
- 3 Complete and coordinate the establishment and management of GIS data
- 3.1 Final review of the establishment and management processes are undertaken to ensure they comply with all requirements and include all specifications and documentations needed to complete the design brief
- 3.2 Appropriate personnel are notified of completion and

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reports and/or completion documents are finalised

- 3.3 Reports and/or completion documents are submitted to relevant personnel/organisations for approval and, where applicable, statutory or regulatory approval
- 3.4 Approved copies of documents regarding the establishment and management process are issued and records are updated in accordance with established procedures

#### **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 Companion Volume Implementation Guide.

# **Unit Mapping Information**

This unit replaces and is equivalent to UETTDRDS49A Establish and manage power system geographical information systems data.

#### Links

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

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