



Australian Government

Department of Education, Employment and Workplace Relations

TLIB3027A Set up and shut down on-train remote control system

Release: 1

TLIB3027A Set up and shut down on-train remote control system

Modification History

Not Applicable

Unit Descriptor

Unit Descriptor

This unit involves the skills and knowledge required to set up and shut down an on-train remote control system in accordance with workplace procedures and the requirements of relevant safeworking regulations and codes of practice. It includes setting up the remote control system, setting up the lead control system, and shutting down the remote control equipment. Licensing or certification requirements are not applicable to this unit.

Application of the Unit

Application of the Unit

Persons achieving competence in this unit will need to fulfil the legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines.

Work is performed without supervision, generally within a team environment. It involves the application of routine operational principles and procedures to the setting up and shutting down of the on-train remote control system as part of workplace activities across a variety of operational contexts within the Australian rail system.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Not Applicable

Employability Skills Information

Employability Skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Set up remote control system	1.1 Remote control system components are set up in accordance with operational plans and manufacturers instructions 1.2 Remote motive power units are placed in required operating mode 1.3 Communication code is entered and air and electrical systems are activated 1.4 Brake and traction systems are tested using approved personnel to ensure correct operation
2 Set up lead control system	2.1 Cab console is checked, electrical systems are activated and the system self-test is confirmed 2.2 Communication code is entered and confirmation obtained that system has entered link mode 2.3 Full control is obtained and brake tests are conducted, using lead control equipment, to ensure correct braking is operational 2.4 Procedures to establish total control are repeated where necessary 2.5 Train is moved using the full range of tests to ensure operational safety and control
3 Shut down remote control equipment	3.1 Shut-down procedures of lead and remote control equipment are followed to ensure train security and de-activation of the system 3.2 Equipment indicators or functions are operated to ensure the shut-down process is correct and complete

Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

Required knowledge:

- Applicable legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines
- Relevant OH&S and environmental procedures and regulations
- Controls, instruments and indicators of an on-train remote control unit and their purpose, location and use
- Procedures for the operation of remote control units
- Set-up and shut-down procedures

REQUIRED KNOWLEDGE AND SKILLS

- Braking and safety system procedures
- Procedures for the control of motive power units
- Procedures for managing hazardous situations involving on-train remote control systems
- Procedures for identifying equipment defects in remote control units and assessing any identified defective units for appropriate action
- Critical on-train remote control information including compatible coupling, braking and drive equipment, ancillary systems, and signalling systems

Required skills:

- Communicate effectively with others when setting up and shutting down an on-train remote control system
- Read and interpret instructions, procedures, information and signs relevant to the setting up and shutting down of an on-train remote control system
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to the setting up and shutting down of an on-train remote control system
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when setting up and shutting down an on-train remote control system
- Promptly report and/or rectify any identified problems, faults or malfunctions when setting up and shutting down an on-train remote control system in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during work activities
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Operate and adapt to differences in equipment in accordance with standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Monitor performance of equipment
- Judge speeds and movements when operating unit over short distances

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

- The evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
 - the underpinning knowledge and skills
 - relevant legislation and workplace procedures
 - other relevant aspects of the range statement
- Assessment must include exercises which demonstrate competent performance of the following in a range of situations:
 - setting up remote control system in a range of configurations and/or trains
 - conducting post set-up tests to ensure remote control system is operating correctly
 - shutting down remote control system correctly

Context of and specific resources for assessment

- Performance is demonstrated consistently over a period of time and in a suitable range of contexts
- Resources for assessment include:
 - a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
 - access to an appropriate range of relevant operational situations in the workplace
- In both real and simulated environments, access is required to:
 - relevant and appropriate materials and equipment, and
 - applicable documentation including workplace procedures, regulations, codes of practice and operation manuals

Method of assessment

- Assessment of this unit must be undertaken by a registered training organisation
- As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests
- Practical assessment must occur:
 - through activities in an appropriately simulated environment, and/or
 - in an appropriate range of situations in the workplace

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

- | | |
|--|--|
| Operations conducted: | <ul style="list-style-type: none">• by day or night• in all relevant weather conditions |
| On-train remote control equipment may be: | <ul style="list-style-type: none">• any mechanism and operating system to allow the control of one motive power unit which is part of a train from another unit which is part of the same train |
| Motive power units may include all motive power units in service within Australian rail systems and may include: | <ul style="list-style-type: none">• diesel locomotives• electric locomotives• railcars• non-operational units |
| Remote control operation may be used: | <ul style="list-style-type: none">• within a yard for the purpose of marshalling• shunting or on running lines• on running lines |
| Safety and protective equipment may include: | <ul style="list-style-type: none">• high visibility clothing• end of train markers• gloves• sunscreen• sunglasses• safety glasses• insect repellent• safety headwear• safety footwear• portable radios/mobile phones• hand lamps• flags• safety devices• hearing protection |
| Information/documents may include: | <ul style="list-style-type: none">• workplace procedures and instructions and job specifications• induction and training materials• relevant log or record books• maintenance specifications, notices, records and requests• local instructions• equipment operation manuals |

RANGE STATEMENT

Applicable regulations and legislation may include:

- operational instructions, policies and procedures
- emergency procedure manuals
- two-way radio operation procedures
- conditions of service, legislation and industrial agreements including workplace agreements and awards
- legislated rail safety requirements including acts and regulations from each applicable state and territory together with any nationally approved compliance codes and/or guidelines
- relevant state/territory OH&S legislation
- relevant state/territory environmental protection legislation
- relevant Australian Standards

Unit Sector(s)

Not Applicable

Competency Field

Competency Field

B - Equipment Checking and Maintenance