

Sydney Trains



Engineering System Integrity
Engineering Standard
Signalling and Control Systems

ST S 43002

Work Safely in a Live Signal Location (SCS02)

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Document control

Version	Date	Author/Prin. Eng.	Summary of change
1.0	28 May 2018	Mark Albrecht	First issue as Sydney Trains document
1.1	13 December 2022	David Mulley	3-year review: no changes to technical content. Date and version number updated.

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1 Work Safely in a Live Signal Location (SCS02)

This unit covers the application of knowledge required to work safely in a Live Signal Location.

1.1	Elements	1.2	Performance Criteria
SCS02.1	Prepare to work in a Live Signal Location	SCS02.1.1	All necessary documentation, relevant standards and work instructions are obtained
		SCS02.1.2	Understand the scope of works (including limitations) and the reporting relationships in case of incident
		SCS02.1.3	All necessary resources, including competent staff, tools and equipment are obtained
		SCS02.1.4	All necessary planning and reporting arrangements for track access and worksite protection ('work on track') are completed
SCS02.2	Access a Live Signal Location	SCS02.2.1	Arrange notifications of work to be carried out. Enter location and identify existing signalling equipment and determine the work area
		SCS02.2.2	Identify the personal safety risks, and establish controls of the work area
		SCS02.2.3	Identify the signalling safeworking risks and establish controls of the work area
SCS02.3	Working safely in a Live Signal Location	SCS02.3.1	Install a "Notice of works in progress" in the signal location
		SCS02.3.2	Carry out the work activities according to the scope of work/work instruction
		SCS02.3.3	Ensure that work does not compromise the integrity of the signalling system
SCS02.4	Complete notifications and egress from a Live Signal Location	SCS02.4.1	Ensure work area is clear and secure location on exit
		SCS02.4.2	Arrange notifications of completed work and reporting responsibilities

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1.3 Range of Variables

Signal Location includes:

- relay rooms
- walk in locations
- apparatus cupboards
- signalling equipment outside of a relay room, walk-in location and apparatus cupboard and signalling field equipment.

Relevant standards and instructions include:

- SWMS and SWIs
- Project Safety Agreement, Interface Co-ordination Plan, Site Integrity Agreement and Project Safety Management Plan
- Work Instructions
- Signalling Safeworking Procedures:
 - Risks and Controls Associated with Testing and Certifying Equipment
 - Renewals Work
 - Security, fire protection, weather proofing and cleanliness of signalling equipment, housings and locations
 - Use of Radio Transmitters Near Electronic Signalling Systems
 - Safety Issues for Signalling Personnel
 - Signalling Locations and Equipment – Security Locks and Keys.
- Equipment Specifications
- Manufacturer’s equipment manuals.

Standard configuration documents and records include:

- Circuit Books
- Track plan/signalling plan or Detailed Site Surveys (DSS).

Work activities may include:

- observation and photography
- physical measurements
- using approved type of testing equipment
- running wiring in a Live Signal Location
- removing wiring in a Live Signal Location
- equipment installation
- site inductions.

Work activities specifically exclude:

- Connection and disconnection to and from working equipment.
- Construction signalling work that is not classed as interface work.

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1.4 Knowledge Requirements

The following underlying knowledge elements are requirements for achieving of this competence:

- Read and follow work instructions.
- Read and interpret signalling documentation.
- Communication protocol.
- Reporting and contact relationships.

1.5 Competency Requirements

The following pre-requisite entry requirements, training and competency requirements shall be achieved prior to the awarding of this competency.

Pre-Requisite Entry Requirements

- Rail Industry Safety Induction card (RISI).
- WHS General Construction Induction Training Card (GIT Card also known as White Card).
- Appropriate qualification relevant to the work.
- Rail Safety Worker Category 3 Health.

Training Requirements

- EI06 Access to and working safely in a Live Signal Location.

Technical Competency

- Be assessed as competent using Competency Assessment Tool *MN S 43002 Working Safely in a Live Signal Location*.

Behavioural Competency

Be assessed as competent as detailed in Behavioural Competency process for work safely in Live Signal Location which is based on the following OPQ categories:

- Working with people.
- Adhering to principles and values.
- Planning and organising.
- Following instructions and procedures.
- Coping with pressures and setbacks.

1.6 Evidence Guide

This provides essential advice for the assessment of the unit and must be read in conjunction with the performance criteria and range statement.

Each element and associated performance criteria must be demonstrated on at least two occasions, one of which is a practical demonstration.

Before the critical aspects of evidence are considered, all pre-requisites must be met.

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Candidates demonstrate their knowledge and understanding of carrying out work in a Live Signal Location by:

- Documentary evidence of appropriate training and qualifications held.
- Log book showing relevant experience working in a live railway signalling environment and supervisors report.
- Responses to questioning by the competence assessor.

Candidates demonstrate their competence to carry out work in a Live Signal Location by:

- Preparing to carry out work in a Live Signal Location.
- Accessing a Live Signal Location.
- Working safely in a Live Signal Location.
- Completing notifications and egress from a live signal location.

Critical aspects of evidence required to demonstrate competency in this unit

Demonstrated consistent performance across a representative range of contexts from the prescribed items below.

Carry out work safely in a Live Signal Location including the following:

- Site access obtained correctly.
- Interpreting signalling documentation and/or DSS correctly.
- Identifying the risks of working in a Live Signal Location.
- Mitigating the risks that were identified.
- Carry out the work safely.
- Directing and communicating effectively with team members.
- Leaving the signal location in a clean and tidy state.
- Completing relevant records and documentation.
- Dealing with unplanned events by drawing on essential knowledge and skills to provide appropriate solutions incorporated in the holistic assessment with the above listed items.

1.7 Assessment Context

This unit should be assessed as it relates to normal workplace practice using procedures, information and resources typical of a workplace. This should include a suitable work environment, facilities, equipment and materials to undertake actual work as prescribed in this unit.

Where simulation is considered a suitable strategy for assessment, conditions must be authentic and as far as possible, replicate the real workplace environment both behaviourally and functionally.

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