

Sydney Trains



Engineering System Integrity  
**Engineering Procedure**  
**Signalling and Control Systems**

# PR S 43015

## Plan and Direct Inspection and Testing of Signalling Works (SCP15)

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## Document control

Version	Date	Author/Prin. Eng.	Summary of change
1.0	4 June 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.

## Summary of changes from previous version

Summary of change	Section
TAE40110 updated to TAE40116 to reflect current version	

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# 1 PR S 43015A Plan and Direct Inspection and Testing of Signalling Works (SCP15A)

This unit covers the procedures and the current requirements for the authorisation of personnel to Plan and Direct Inspection and Testing of Signalling Works.

1.1 Item	1.2 Details
<p><b>1. Prerequisites</b></p> <p><b>2. Application</b></p> <p><b>3. Assessment requirements</b></p> <p><b>4. Assessment</b>                      Desktop Assessment</p> <p>Behavioural Assessment</p> <p>Hands on Assessment</p>	<p>Refer to Engineering Standard Signalling &amp; Control Systems Competency Standards ST S 43015</p> <p>Candidate submits request for authorisation for Plan and direct Inspection and Testing of Signalling Works</p> <p>Prior to assessment, candidates will submit:</p> <ul style="list-style-type: none"> <li>• Portfolio of documentary evidence of appropriate training and qualifications held</li> <li>• Copies of log book pages showing relevant experience (or in default, a verified CV extract showing when relevant experience was achieved) as described in MN S 41412</li> </ul> <p>The candidate shall be able to:</p> <ul style="list-style-type: none"> <li>• Demonstrate Technical competencies as described in Engineering Standard Signalling &amp; Control Systems Competency Standard ST S 43015</li> </ul> <p>The assessment is in three parts:</p> <ul style="list-style-type: none"> <li>• By review of the Candidate's portfolio of Evidence and by responses to questioning by the assessor, they demonstrate knowledge and understanding of Plan and Direct Inspection and Testing of Signalling Works</li> <li>• Candidate meets the requirements of the selected behavioural competencies survey by completing the on line OPQ</li> <li>• Candidate demonstrates ability to undertake Plan and Direct Inspection and Testing of Signalling Works as described in Engineering Manual Signalling &amp; Control Systems Competency Assessment Tool MN S 43015</li> </ul>

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1.1 Item	1.2 Details
<p><b>5. Competence Assessor</b></p> <p><b>6. Assessment Outcomes</b></p>	<p>These requirements shall be assessed and certified by persons having the requisite assessment qualifications (i.e. Cert IV TAE40116 or equivalent)</p> <p>Based on the evidence provided in the documentary materials provided and the assessment, the candidate is assessed to be:</p> <ul style="list-style-type: none"> <li>• Not ready for assessment</li> </ul> <p>The candidate was not adequately prepared for the assessment, lacks, prerequisites or requires significant additional training and experience</p> <p>These deficits should be addressed before re-applying for assessment:</p> <ul style="list-style-type: none"> <li>• Not yet competent</li> </ul> <p>The candidate lacks one or more elements to be assessed competent</p> <p>The candidate may be reassessed on the missing elements as soon as they can be prepared:</p> <ul style="list-style-type: none"> <li>• Not yet competent to work independently, but competent to work under supervision</li> </ul> <p>The candidate has demonstrated all prerequisites and skills at a basic level, but has not shown a sufficient level of mastery to be able to perform effectively without guidance</p> <p>Unrestricted competence can be granted on the basis of a satisfactory supervisor's report, following a period of work under supervision:</p> <ul style="list-style-type: none"> <li>• Competent</li> </ul> <p>The candidate has satisfied all requirements</p>
<p><b>7. Candidate debriefing</b></p>	<p>Assessor debriefs the candidate on the outcomes of the assessment, the elements (if any) in which they were found to be not yet competent, and their options for reassessment after completing further development, or appealing the outcome</p>

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### 3 Behavioural Competencies

The behavioural competency requirements for ST S 43015 are as follows:






Competency	Descriptor	Benchmarked Score
Deciding and Initiating Action	<ul style="list-style-type: none"> <li>• Makes prompt, clear decisions which may involve tough choices or considered risks</li> <li>• Takes responsibility for actions, projects and people</li> <li>• Takes initiative, acts with confidence and works under own direction</li> <li>• Initiates and generates activity</li> </ul>	3 or higher
Applying Expertise and Technology	<ul style="list-style-type: none"> <li>• Applies specialist and detailed technical expertise</li> <li>• Develops job knowledge and expertise through continual professional development</li> <li>• Shares expertise and knowledge with others</li> <li>• Uses technology to achieve work objectives</li> <li>• Demonstrates appropriate physical co-ordination and endurance, manual skill, spatial awareness and dexterity</li> <li>• Demonstrates an understanding of different organisational departments and functions</li> </ul>	3 or higher
Analysing	<ul style="list-style-type: none"> <li>• Analyses numerical data, verbal data and all other sources of information</li> <li>• Breaks information into component parts, patterns and relationships</li> <li>• Probes for further information or greater understanding of a problem</li> <li>• Makes rational judgements from the available information and analysis</li> <li>• Produces workable solutions to a range of problems</li> <li>• Demonstrates an understanding of how one issue may be a part of a much larger system</li> </ul>	3 or higher
Planning and Organising	<ul style="list-style-type: none"> <li>• Sets clearly defined objectives</li> <li>• Plans activities and projects well in advance and takes account of possible changing circumstances</li> <li>• Identifies and organises resources needed to accomplish tasks</li> <li>• Monitors performance against deadlines and milestones</li> </ul>	3 or higher

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Competency	Descriptor	Benchmarked Score
Delivering Results and Meeting Customer Expectations	<ul style="list-style-type: none"> <li>• Focuses on customer needs and satisfaction</li> <li>• Sets high standards for quality and quantity</li> <li>• Monitors and maintains quality and productivity</li> <li>• Works in a systematic, methodical and orderly way</li> <li>• Consistently achieves project goals</li> </ul>	3 or higher

## 4 Competency Rating Scale

A five point rating scale is used for the assessment of behavioural competencies.

1	2	3	4	5
				
Significantly lower than required benchmark Not likely to be a strength	Lower than Benchmark Less likely to be a strength	Meets Benchmark Likely to be a strength	Exceeds Benchmark to be a strength Quite likely to be a strength	Significantly exceeds benchmark to be a strength Very likely to be a strength

## 5 Assessment Methodology

Assessment in this competency is undertaken using one, or a combination of the following methods

- Candidate completion of Occupational Personality Questionnaire (QPQ). This questionnaire is used throughout the world and has been designed to identify an individual's most likely patterns of behaviour (see the use of OPQ in behavioural assessment background document).
- Behavioural Interview conducted with candidates supervisor.
- Behavioural interview conducted with candidate.

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## 6 Behavioural Assessment Process

### 6.1 Process Stages

The following definitions apply in this document:

- a. Candidate completes the online OPQ.
- b. Normative data is analysed and indicative benchmarks recorded.
- c. Indicators that are not consistent with profile benchmarks are explored further with the candidates' current or recent supervisor and data is evaluated accordingly.
- d. Where inconsistencies still exist, behavioural interview is conducted with the candidate and results evaluated.
- e. Behavioural competencies are rated and assessment process finalised.
- f. If the candidate does not meet the profile benchmarks, a development plan is put in place and the candidate is re-assessed quarterly using supervisor report mechanism.
- g. If the candidate meets the profile benchmarks a Behavioural Competency Assessment report is produced and included in portfolio of evidence.

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## 6.2 Behavioural Competencies and corresponding questions for Plan and Direct Inspection and Testing of Signalling Works (ST S 43015)

Competency	Descriptor	Supervisor Questions	Candidate Questions
<b>Deciding and Initiating Action</b>	<ul style="list-style-type: none"> <li>• Makes prompt, clear decisions which may involve tough choices or considered risks</li> <li>• Takes responsibility for actions, projects and people</li> <li>• Takes initiative, acts with confidence and works under own direction</li> <li>• Initiates and generates activity</li> </ul>	Contact ESI Signalling Integrity for OPQ Questions.	Contact ESI Signalling Integrity for OPQ Questions.
<b>Applying Expertise and Technology</b>	<ul style="list-style-type: none"> <li>• Applies specialist and detailed technical expertise</li> <li>• Develops job knowledge and expertise through continual professional development</li> <li>• Shares expertise and knowledge with others</li> <li>• Uses technology to achieve work objectives</li> <li>• Demonstrates appropriate physical co-ordination and endurance, manual skill, spatial awareness and dexterity</li> <li>• Demonstrates an understanding of different organisational departments and functions</li> </ul>	Contact ESI Signalling Integrity for OPQ Questions.	Contact ESI Signalling Integrity for OPQ Questions.

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Competency	Descriptor	Supervisor Questions	Candidate Questions
<b>Analysing</b>	<ul style="list-style-type: none"> <li>• Analyses numerical data, verbal data and all other sources of information</li> <li>• Breaks information into component parts, patterns and relationships</li> <li>• Probes for further information or greater understanding of a problem</li> <li>• Makes rational judgements from the available information and analysis</li> <li>• Produces workable solutions to a range of problems</li> <li>• Demonstrates an understanding of how one issue may be a part of a much larger system</li> </ul>	Contact ESI Signalling Integrity for OPQ Questions.	Contact ESI Signalling Integrity for OPQ Questions.
<b>Planning and Organising</b>	<ul style="list-style-type: none"> <li>• Sets clearly defined objectives</li> <li>• Plans activities and projects well in advance and takes account of possible changing circumstances</li> <li>• Identifies and organises resources needed to accomplish tasks</li> <li>• Monitors performance against deadlines and milestones</li> </ul>	Contact ESI Signalling Integrity for OPQ Questions.	Contact ESI Signalling Integrity for OPQ Questions.
<b>Delivering Results and Meeting Customer Expectations</b>	<ul style="list-style-type: none"> <li>• Focuses on customer needs and satisfaction</li> <li>• Sets high standards for quality and quantity</li> <li>• Monitors and maintains quality and productivity</li> <li>• Works in a systematic, methodical and orderly way</li> <li>• Consistently achieves project goals</li> </ul>	Contact ESI Signalling Integrity for OPQ Questions.?	Contact ESI Signalling Integrity for OPQ Questions.

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## 7 Behavioural Competency Assessment Report

### Plan and Direct Inspection and Testing of Signalling Works – Behavioural Competency Assessment

Candidate Name:	Joe Blogs
Report Prepared By:	Bee Checker
Role:	Signal Engineer, Sydney Trains
Date:	Friday 3 December, 2010

This report is provided as evidence of assessment of the behavioural competency of the candidate to Plan and Direct Inspection and Testing of Signalling Works.

Occupational Personality Questionnaire was completed on 22 November, 2010 and the outcome of this assessment indicated that the following competencies needed to be validated via a Supervisors report.

#### Behavioural Competencies assessed – Plan and Direct Inspection and Testing of Signalling Works

		Candidate Overall Rating
<b>Deciding and Initiating Action</b>	<ul style="list-style-type: none"> <li>Makes prompt, clear decisions which may involve tough choices or considered risk</li> <li>Takes responsibility for actions, projects and people</li> <li>Takes initiative, acts with confidence and works under own direction. Initiates and generates activity</li> </ul>	<b>Exceeds Criteria</b>
<b>Applying Expertise and Technology</b>	<ul style="list-style-type: none"> <li>Applies specialist and detailed technical expertise</li> <li>Develops job knowledge and expertise through continual professional development</li> <li>Shares expertise and knowledge with others. Uses technology to achieve work objectives</li> <li>Demonstrates appropriate physical co-ordination and endurance. manual skill, spatial awareness and dexterity</li> <li>Demonstrates an understanding of different organisational departments and functions</li> </ul>	<b>Meets criteria</b>

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		<b>Candidate Overall Rating</b>
<b>Analysing</b>	<ul style="list-style-type: none"> <li>Analyses numerical data, verbal data and all other sources of information</li> <li>Breaks information into component parts, patterns and relationship</li> <li>Probes for further information or greater understanding of a problem</li> <li>Makes rational judgements from the available information and analysis</li> <li>Produces workable solutions to a range of problems</li> <li>Demonstrates an understanding of how one issue may be a part of a much larger system</li> </ul>	<b>Meets criteria</b>
<b>Planning and Organising</b>	<ul style="list-style-type: none"> <li>Sets clearly defined objectives</li> <li>Plans activities and projects well in advance and takes account of possible changing circumstances. Identifies and organises resources needed to accomplish tasks</li> <li>Monitors performance against deadlines and milestones</li> </ul>	<b>Meets criteria</b>
<b>Delivering Results and Meeting Customer Expectations</b>	<ul style="list-style-type: none"> <li>Focuses on customer needs and satisfaction</li> <li>Sets high standards for quality and quantity; Monitors and maintains quality and productivity</li> <li>Works in a systematic, methodical and orderly way; Consistently achieves project goals</li> </ul>	<b>Meets criteria</b>

Supervisors follow up report was conducted with Tee Rex (Commissioning Engineer, Sulphide Junction Project) on Tuesday 30 November to explore the competency of Planning and Organising Mr Rex provided examples that he had observed of Joe Blogs planning and organising resources required to undertake work tasks and being able to organise his time to complete work.

This competency has been assessed as meeting criteria.

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