Discipline
Engineering Standard – NSW

Category
Signalling

Title
Minor Signalling Works on Maintenance Areas Involving Installing, Removal or Altering Signalling Equipment

Reference Number
SMP 21 – (RIC Standard: SC 00 52 00 21 SI)

Document Control

Status	Date	Prepared	Reviewed	Endorsed	Approved
Issue 1 Revision 2	Mar 05	Standards and Systems	Standards Engineer	GM Infrastructure Strategy & Performance	Safety Committee
		Refer to Reference Number	H Olsen	M Owens	Refer to minutes of meeting 12/08/04

Disclaimer

Australian Rail Track Corporation has used its best endeavors to ensure that the content, layout and text of this document is accurate, complete and suitable for its stated purpose. It makes no warranties, express or implied, that compliance with the contents of this document shall be sufficient to ensure safe systems of work or operation. Australian Rail Track Corporation will not be liable to pay compensation in respect of the content or subsequent use of this document for any other purpose than its stated purpose or for any purpose other than that for which it was prepared except where it can be shown to have acted in bad faith or there has been willful default.

Document Approval

The technical content of this document has been approved by the relevant ARTC engineering authority and has also been endorsed by the ARTC Safety Committee.

Document Supply and Control

The Primary Version of this document is the electronic version that is available and accessible on the Australian Rail Track Corporation Internet and Intranet website.

It is the document user's sole responsibility to ensure that copies are checked for currency against the Primary Version prior to its use.

Copyright

About This Standard

This Standard defines the procedures to be followed when it is necessary to carry out minor signalling works involving installing, removing or altering signalling arrangements.

Document History

Primary Source – RIC Standard SC 00 52 00 21 SI Version 2.0

List of Amendments –

ISSUE	DATE	CLAUSE	DESCRIPTION
1.1	01/09/2004		▪ Reformatting to ARTC Standard
1.2	14/03/2005	Disclaimer	Minor editorial change

Contents

1 Introduction

It is often necessary to ensure co-ordination and co-operation with Network Control and other affected parties when carrying out minor signalling works on maintenance areas.

Minor signalling work is defined in the Glossary of Signalling Terms SGS 02-- and is generally distinguished from maintenance and like for like renewal work in that it is work which requires the sign off certification of a Signal engineer

Before any work is commenced the Signal Engineer or a delegated officer must advise all of the parties affected by the work, co-ordinate the works and obtain relevant approvals (Engineering Change Request submitted to Regional Configuration Control Board).

Further to the following, the requirements of specification SCP 07 to SCP 12, "Inspection, Testing, Installation and Commissioning Requirements for Safety Assurance of New and Altered Works" and SMP 14, Document Control of Signal Plans and Circuit Books Issued to the Field, shall be observed, where applicable.

1.1 Responsibilities

The Signal Engineer or delegated officer is responsible for ensuring

- The installation, removal or alteration to signalling equipment is carried out by suitably accredited signalling personnel in accordance with approved designs and current standards
- The relevant approvals are obtained from the affected parties before any work is commenced
- All who need to know of the changes are advised
- The Network rules and Procedures are followed
- The process for correcting the records is promptly initiated and followed through.
- The ARTC Configuration Policy is complied with

1.2 Weekly Notice

All new signalling arrangements, removals, or alterations to the existing signalling arrangements must be advertised in the Weekly Notice prior to being brought into use in accordance with SCP 06, Signalling Documentation and Drawing Specification Section 12

1.3 Certification

A Commissioning Certificate detailing the changes shall be completed for every alteration or addition to signalling arrangements which have been advertised in the weekly notice.

The certificate shall be filled in indelibly and signed by the Signal Engineer in charge of the work at the time it is brought into use ie. the Commissioning Engineer.

The certificate and all relevant testing and certification records shall be forwarded to the Maintenance Signal Engineer on the date the work is completed.

The certificate shall be kept on the file related to the particular work in the office of the Maintenance Signal Engineer.

Before signing the certificate the Signal Engineer shall be satisfied that the whole of the work has been inspected, tested and certified.:

If the Signal Engineer is unable to certify to the whole of the particular work referred to, the certificate shall be withheld, and a report forwarded to the Regional Manager and Maintenance Signal Engineer. The certificate shall be forwarded as soon as all the work is complete.

The "Booking-in certification" section of the Infrastructure Booking Authority form (NRF 003) shall be signed jointly by the officers in charge on completion of the work. One copy shall be forwarded to the Maintenance Signal Engineer and one copy to Train Control.

A Mechanical/Relay Locking Test Certificate shall be completed whenever a new interlocking is brought into use, or whenever alterations are carried out to the locking in an existing interlocking machine. The certificate, signed off by the suitably accredited person who conducted the locking test, shall be forward to the Maintenance Signal Engineer, immediately the interlocking machine has been tested and brought into use.

Note: All forms are to be kept on the Project File and/or Commissioning Work Package. Copies of the Interlocking Test Certificates are to be kept by the Maintenance Signal Engineer.

The Certified Office Copy shall be prepared signed and submitted in accordance with SMP 14, Document Control of Signal Plans and Circuit Books Issued to the Field.

1.4 Handover

Project Handover to be conducted in accordance with section W42P03 of the Project Management Manual summarised below.

When project has reached practical completion the Project Engineer is to advise Regional Signal Engineer Representative and arrange site inspection at earliest convenience. Upon inspection Practical completion form (WF4201) compiled and signed.

Any defects documented on defect form (WF4202) and agreement reached on rectification date.

Final completion of the project will be accepted once all defects have been rectified and once all configuration obligations have been met, these shall include the following,

1. All documentation including circuit books have been updated.

2. All asset information has been submitted and entered into applicable databases.

3. New equipment and spares have been catalogued and stock code numbers issued.

4. Any training obligations have been met.

Once these obligations have been met the Final completion form (WF4203) can be signed off by the Project Engineer and the Regional Signal Engineer Representative

1.5 Check List

The following check list covers typical items to be considered when carrying out minor signalling works.

CHECK LIST FOR MINOR SIGNALLING WORKS

ACTIONS	REQUIRED	ISSUED	RETURNED
1. Design Documentation			
1. Circuit Book			
2. Track Plan			
3. Track Insulation Plan			
4. Working Sketch			
5. Control Table			
6. Locking Table			
7. Locking Diagram			
8. Lever Nameplates			
9. Box Diagrams (Pulling Lists)			
10. Indicator Diagram/Console/Panel			
11. Clearance Point List			
12. Drivers Diagram			
13. Detailed Site Survey Drawings			
14. Signal Sighting Forms			
15. Mechanical Drawings			
16. Cable Plans			
17. Linewire Diagrams			

2. Notification of Work			
Weekly Notice			
Circular			
STN			
3. Safeworking Forms, Permits etc			
Commissioning Certificate			
SF S4 304A/B[mech/relay lockg. test cert]			
SF S4 304C[desgn intg./cont table test cert]			
Weekly Notice Request			
NRF003			
Electrical Permit			
4. Staffing			
Work Rosters			
O/T Restrictions			
Handsignallers			
Operations			
Locomotive Operations			
Electrical			
Civil			
5. Other Disciplines/Parties	Affected	Advised	Details Issued
Electrici al			
Civil			
Operations/Mechanical			

Tele-Communications			
Local Government Power Supply Authority Pipe Line Authorities Pacific National State Rail Authority Other rail operators			