



AUSTRALIAN RAIL TRACK CORPORATION LTD

Discipline: Engineering (Signalling)

Category: Procedure

# Signal Service Schedules Index

## ESM-26-04

### Applicability

ARTC Network Wide	✓
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### Primary Source

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1.3	02 Aug 13	Standards	Stakeholders	Operations Safety & Environment Review Group	Safety & Environment Committee 19/08/2013

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1.0	21 May 09		First issue. Supersedes NSW Standard SMS 15 v1.2 in part and SMS 16 v1.2
1.1	07 Oct 09		Disclaimer updated as per Risk & Safety Committee
1.2	13 Aug 10	All	Issued as final.
1.3	02 Aug 13	1.2, 1.3, 1.4, 2.1, 2.2, 3	Amended to conform with format implemented in NSW at take-up of the NSW lease and adopted for rollout of Ellipse in SA and Vic. Minor editorial updates throughout document.

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# 1 Introduction

## 1.1 Purpose

This procedure specifies the identification schedule for Signalling Maintenance Service Schedules.

## 1.2 Scope

This procedure covers all ARTC jurisdictions. It details signals asset identification schema to be applied to signal maintenance service schedules. It is consistent with the identifications used for signalling assets.

## 1.3 Responsibilities

The Signal Standards Engineer is responsible for the application of new identifications for new types or classes of equipment. This would normally be undertaken at the time of type approval.

The Signal Maintenance Engineers are responsible for reporting the requirement for new service schedules to the Signalling Standards Engineer. The Signal Maintenance Engineers shall also use this identification schema in the naming of related documents.

## 1.4 Reference Documents

The following documents support this procedure:

- Technical Maintenance Plans
- Maintenance Service Schedules.

## 2 General

The Service Schedule Identification Schema has four levels:

- The first level is the equipment class or system
- The second level is the equipment sub-system
- The third level is the type
- The fourth level is the service type.

### 2.1 Equipment Classes

The following equipment classes and identifications will apply:

- 01 – Train Control Workstation and Equipment Status Monitors
- 02 – Telemetry
- 03 – Train Control System
- 04 – Spare
- 05 – Interlockings, Mechanical, Relay and CBI
- 06 – Spare
- 07 – Field equipment, signals, points, train detection, level crossings, trackside equipment
- 08 – Token block
- 09 - Power Supplies
- 10 – Communications for signalling
- 11 – Cable and line route
- 12 – Enclosures
- 13 - Communications Based Signalling systems
- 14 – Communications Based Signalling – Train Borne equipment.

### 2.2 Maintenance Service Type

Typically, the maintenance service level 1 (SS01) is the base service level and is done most frequently. However for points, an "L" (switch plate lubrication and zonal inspection) service has been introduced with the maintenance periodicity based on local operating conditions determined by the responsible Signal Work Group Leader. The "L" service is more frequent but not mandatory to cater for SS01 services that are set more frequently in response to asset condition. The level 2 service is undertaken at a longer periodicity than the level 1 service. Similarly for the level 3 service, level 4 service and level 5 service.

The service period for these is defined in the Technical Maintenance Plan.

### 2.3 Equipment Types

Where different models or manufacturers of an equipment require different service schedules then a separate equipment identification will be allocated. Where a common service schedule can be applied, which is preferable, then only one equipment identification is allocated.

### 3 Signals Maintenance Service Schedules

The schema is as follows:

ID	System Category	Asset	Type
01 00	Control and Monitoring Systems		
01 15 01		Train Control Workstation	Phoenix CTC
01 15 02		TTM Workstation	Phoenix
01 15 03		Maintainer VDU Workstation	Phoenix
01 15 04		Maintainer VDU Workstation	TMACS Train Order
01 51 02	Equipment Status Monitors	Level Crossing Control Centre	Cerberus
01 51 03		Equipment Monitor Management System	4SITE
02 00 00	Telemetry		
02 11 01		S2/Rabbit	
02 12 01		FDM	
02 13 01		iMAC	
02 14 01		Kingfisher 2	
02 14 02		Teknis	
02 14 03		Moscad	
02 15 01		Genysis – Microlok II	
02 15 02		Genysis – VHLC	
02 16 01		HD Link	
03 00	Train Control Systems		
03 11 01		Phoenix	
05 00	Interlockings		
05 10 00	Relay Interlocking		
05 11 01		AC Shelf Line Relays (unproved)	
05 11 02		AC Shelf Line Relays (proved)	
05 11 03		AC Shelf Line Relays (track)	
05 11 04		AC Shelf Time Limit Relays	
05 12 01		DC Shelf Line Relays (unproved)	
05 12 02		DC Shelf Line Relays (proved)	
05 12 03		DC Shelf mounted relays (track)	
05 13 00		Miniature Plug in Relays	
05 14 00		Large Plug in Relays (Line)	
05 14 02		Large Plug in Relays (time limit)	
05 20	Mechanical Interlocking		
05 21 01		Direct Action Main Frame	
05 21 02		Ground Frame – Type E or F or G	
05 22 01		Cam and Tappet Main Frame	
05 40	Computer Interlocking		

05 43 01		Microlok II	
05 44 01		VPI	
05 45 01		Westrace 1	
05 45 02		Westrace II	
05 45 06		SSI	
05 45 07		Westlock	
05 46 01		VHLC	
05 46 02		EC4	
05 46 03		ElectroLogIXS	
05 50 00	Mechanical Releasing Arrangements		
05 51 01		Emergency Releasing Lock	
05 51 02		Pilotmans Lock	
05 51 03		Half Pilot Staff Lock	
07 00	Field Equipment		
07 12 00	Signal Colour Light		
07 12 01		Signal Incandescent (Incl MLI)	
07 12 11		Signal LED (Incl MLI)	
07 13 01		Signal Shunt Vertical – Incandescent	
07 13 02		Signal Shunt Vertical – LED	
07 14 01		Signal Shunt Position Light – Incandescent	
07 14 02		Signal Shunt Position Light – LED	
07 19 00	Signal Mechanical		
07 19 01		Signal Lower Quadrant Semaphore	
07 19 03		Dwarf Lower Quadrant	
07 30	Points		
07 31 00		Combined Electric Machines	
07 34 00		Mechanical & Derailers	
07 36 00		Clamp Lock Electric	
07 37 00		Claw Lock with Westinghouse 84 series Electric Machine	
07 38 01-04		Spherolock with Siemens 700 series Electric Machine	
07 38 04-08		Spherolock with Westinghouse 84 series Electric Machine	
07 40	Train Detection		
07 41 00		Track Circuit DC	
07 42 00		Jeumont HVI	
07 43 00		Track Circuit AC	
07 44 00		Track Circuit Audio Frequency	
07 45 00		Axle Counter	
07 46 00		Treadle	

07 47 00		Track Circuit Coded	
07 47 00		Predictor Track Circuit	
07 50	Switch Locks and Releasing Switches		
07 51 01-04		Releasing Switch	
07 51 04-06		Switchlock	
07 60	Level Crossings		
07 61 01		TYPE F LIGHTS AND BELLS (ONLY)	
07 62 00		Pedestrian Level Crossing	
07 63 00		Type F Lights, Bells and Booms	
07 80	Wayside Warning Devices		
07 81 00		Civil Event Monitor	
07 82 00		Rolling Stock Monitor	
07 90	Miscellaneous Trackside Equipment		
08 10	Token Block		
08 11 00		Train Staff	
09 00	Power Supplies		
09 11 00		AC supplies	
09 11 02		Motor Generator	
09 11 04-07		Inverters & Converters (incl UPS)	
09 12 00		Battery Supplies (incl Solar)	
10 00	Communications		
10 11	Trackside Communications	Signal Telephones	
10 20	Vital Radio Communications (Signalling)		
11 00	Cable / Line Wire Route		
11 10		Signalling Cable	
11 20		Cable route	
11 30		Line Pole Route	
11 30	Equipment Enclosures		
13	Communications Based Signalling	Field & Office equipment	
14	Communications Based Signalling	Train Borne Equipment	