

Equipment Register - Updating and Maintenance

EGP-03-02

Applicability

ARTC Network Wide
SMS

Publication Requirement

Internal / External

Primary Source

PP-186 (v2.0)

Document Status

Version #	Date Reviewed	Prepared by	Reviewed by	Endorsed	Approved
1.7	16 Jul 20	Configuration Manager	Stakeholders	Manager Standards	General Manager Technical Standards 27/08/2020

Amendment Record

Amendment Version #	Date Reviewed	Clause	Description of Amendment
1.0	17 Dec 09		First Issue. Supersedes PP-186 version 2.0
1.1	02 Mar 10		All references to ADA changed to "ADA or designated officer" as directed by Risk & Safety Committee as part of approval to withdraw PP-186
1.2	13 Feb 12		Amend procedure and form to include the update of redundant equipment.
1.3	30 Mar 15		Various appropriate changes due to business changes to bring

© Australian Rail Track Corporation Limited (ARTC)

Disclaimer

This document has been prepared by ARTC for internal use and may not be relied on by any other party without ARTC's prior written consent. Use of this document shall be subject to the terms of the relevant contract with ARTC.

ARTC and its employees shall have no liability to unauthorised users of the information for any loss, damage, cost or expense incurred or arising by reason of an unauthorised user using or relying upon the information in this document, whether caused by error, negligence, omission or misrepresentation in this document.

This document is uncontrolled when printed.

Authorised users of this document should visit ARTC's intranet or extranet (www.artc.com.au) to access the latest version of this document.

			maintenance back in house.
1.4	29 July 15		Update procedure to clarify roles and responsibilities of staff associated with the updating of the asset register and associated requirements.
1.5	21 Aug 15		Replace form examples and update misleading references.
1.6	9 Jan 17		Position titles in Responsibilities Section 1.4 updated following organisational structure changes with changes also updated in associated references and on the Change Authorisation Form
1.7	16 Jul 20	1.4, 1.5.1, 1.5.2 & 1.6.1	Section 1.4 - Included ability for Corridor Manager / Maintenance Manager to delegate authority for approval. Section 1.5.1 and 1.5.2 - Updating of responsibility for adding/removing/modifying Ellipse Equipment Register and MSTs

Table of Contents

Table of Contents3

1 Introduction.....4

1.1 Purpose4

1.2 Scope4

1.3 Procedure Owner4

1.4 Responsibilities4

1.5 Definitions.....4

1.5.1 *Equipment Register Data Management Responsibilities* 6

1.5.2 *Maintenance Schedule Tasks (MST)*..... 6

1.6 Equipment/MST Update Change Request Responsibilities6

1.6.1 *Change Request Initiator*..... 6

1.6.2 *Asset Data Administrator*..... 7

1.6.3 *Asset Systems Support Officer*..... 7

1.6.4 *Area Manager / Signal Maintenance Engineer / Structures Manager*..... 8

1.7 Reference Documents9

2 Appendix A: Change Authorisation Form10

3 Appendix A1: Sample Change Authorisation Form.....11

4 Appendix A2: Change Authorisation Form Nomenclature12

4.1 Equipment12

4.2 MST13

4.3 Signature Block13

5 Appendix A3: Equipment Class14

5.1 Class and Description14

6 Appendix A4: Equipment Status.....16

1 Introduction

1.1 Purpose

The purpose of this procedure is to detail requirements for updating the Equipment Register and Maintenance Schedule Task Records.

1.2 Scope

This procedure covers recording of configuration changes to ARTC infrastructure and the Routine Inspection Scheduling in the Asset Management System.

1.3 Procedure Owner

The Configuration Manager is the Procedure Owner and is the initial point of contact for all queries relating to this procedure.

1.4 Responsibilities

Asset Manager is responsible for ensuring compliance of personnel in their area with ARTC Policies and Procedures.

Maintenance Manager / Corridor Manager is responsible for approving changes to infrastructure equipment and Maintenance Schedule Tasks (MSTs) records as per ETE-00-03. The Maintenance Manager or Corridor Manager may delegate this approval authority if desired. If delegated the following shall apply;

- The delegation is recorded in writing, stored, and available in the event of audits or investigations.
- The period the delegation is valid for is clearly indicated (e.g. forever in perpetuity, or for a financial year, etc)
- The delegation indicates the job role being delegated to, rather than an individual's name.
- The delegation indicates the level of authority of the delegation being provide
 - e.g. All approval actions on the form.
 - e.g. Only for changes to MSTs and Updating Existing and Redundant Equipment – but not for Adding or Disposing Equipment
 - Or any combination desired by the Maintenance Manager or Corridor Manager

Change Initiators are responsible for advising Area Managers where changes are required to infrastructure equipment or MSTs they are required to maintain.

Area Manager, Signal Maintenance Engineer, or Structures Manager is responsible for ensuring recommended changes to infrastructure equipment and MSTs are appropriate and correct.

Asset Maintenance Management System Administrator (AMMSA) and Asset Systems Support Officer (ASSO) are responsible for ensuring required changes are correctly recorded.

1.5 Definitions

The following terms and acronyms are used within this document:

Term or acronym	Description
ADA	Asset Data Administrator or designated officer
AMMSA	Asset Maintenance Management Systems Administrator
ASSO	Asset Systems Support Officer
CCL	Configuration Change List for identifying configurable items in the configuration change management process as per <i>EGP-03-01 Rail Network Configuration Management</i>
Change Initiator	The person initiating the change. For example, this may be the ARTC Project Manager, Major Works Alliance Partner, Area Manager, Signal Electrician, Work Group Leader, qualified Infrastructure Maintainer.
Discipline	Infrastructure is grouped into disciplines, the main disciplines being civil track, civil structures, signals and electrical.
Ellipse	Ellipse is a proprietary enterprise resource planning software sold and supported by Mincom that is used in ARTC for management of the Assets.
Equipment Number	A unique system generated number used to relate equipment in certain modules.
Equipment Register	Is used to record details of all infrastructure maintained by ARTC.
Inspection	Is the regular and scheduled examination and checking of infrastructure for the purposes of ensuring the infrastructure is operating safely and to the specified standard. Inspections must be carried out by Authorised Asset Management Staff.
Maintenance Schedule Task (MST)	Is a record in the Equipment Register to link a standard job from the Technical Maintenance Plan to an item of equipment with the inspection frequency and the last date maintained to create a work order for the next Preventative Maintenance task.
MSE600	Fixed Equipment Register
MSEMST	Maintenance Schedule Tasks
NAN	Network Alteration Notice
Standards	Are defined on the ARTC Intranet and amended from time to time.
Standard Job	Is a record in Equipment Register to indicate what work is required on an item of equipment and is generally related to the relevant Technical Maintenance Plan (TMP)
Structured Plant Number – SPN	A combination of plant detail fields to form a unique equipment identifier
Technical Maintenance Plan	Is a document that references ARTC Engineering Standards and sets out the maintenance policy for infrastructure in terms of mandatory preventative maintenance and minimum service

Term or acronym	Description
	frequency by asset type.
Work Groups	Are the teams of maintenance personnel that will carry out the Preventative Maintenance activities and Corrective Maintenance activities. These may include Maintenance and Utility Work Groups, Contractors, as well as Regional based teams such as Resleepering Team or Resurfacing Team. The KK Operator is also allocated as a Work Group.

1.5.1 Equipment Register Data Management Responsibilities

The addition of new Asset Records, or the removal / modification of existing Assets Records in the Equipment Register is the responsibility of Asset Management Support (AMMSA/ASSO) with approval of the local asset owner (e.g. structures, track & civil, signalling) and Corridor/Maintenance Manager (or delegate).

1.5.2 Maintenance Schedule Tasks (MST)

The addition of new MSTs, or the removal / modification of existing MSTs in the Scheduling Register is the responsibility of Asset Management Support (AMMSA/ASSO) with approval of the local asset owner (e.g. structures, track & civil, signalling) and Corridor/Maintenance Manager (or delegate).

Note 1: The ASSO or the AMMSA can provide assistance with bulk updating Assets or MSTs for Project related equipment changes. Data Load Templates will be made available from the ASSO or AMMSA to assist to obtain standardised, structured data from Project staff.

1.6 Equipment/MST Update Change Request Responsibilities

1.6.1 Change Request Initiator

1. For a given activity, the ASSO or AMMSA will provide the Change Request Initiator with a list of current assets located within the project works boundaries. The ASSO or AMMSA shall use the Equipment and MST load template spreadsheets which highlight the mandatory fields that are needed in order to successfully update the Asset Management System.
2. The Authorised Equipment Register/MST Change Authorisation Form (refer to Appendix A) is used for any equipment or MST change request received from Project or Maintenance staff. When bulk asset changes are requested by the Change Request Initiator, only one form is required to be completed pertaining to a spreadsheet of such asset data. This form is to be completed before any asset update(s) can be completed.
3. The NAN number must be recorded onto the Change Authorisation Form (CAF) and shall be recorded against each asset changed. A copy of the NAN should accompany the Change Authorisation Form.
4. The Change Request Initiator shall also provide the local area ADA with a list of Work Orders/Defects that are to be closed or amended, as asset changes occur. The following information is required to be forwarded to the local area ADA for their attention:
 - Work Order/Defect No, Asset No, Required Change or Closed Text, Closed By, Closed Date

5. Once the Change Authorisation Form, NAN, Data Load Templates and Work Order/Defect information have been completed by the Change Initiator, the documents shall be returned to the local area ADA. The proposed changes shall be certified correct by the Area Manager, Signal Maintenance Engineer or Structures Manager (whoever is applicable for the proposed change) and then approval by the Maintenance / Corridor Manager / Delegated Role (Note : if approved by a delegate, add the role of the position performing the approval onto the form). Once the changes have been approved, the CAF is passed onto the ASSO, AAMSA or ADA for the appropriate action in a timely manner prior to commissioning.
6. Once the revised data records are loaded, the Change Authorisation Forms are signed off and returned to the Change Request Initiator. This is the authority for the Change Initiator to certify the asset changes are completed on the Configuration Change List.

Note 2: If the data does not meet systems requirements in order to be successfully loaded into the Asset Management System then it will be rejected and passed back to the Change Initiator. The Asset Systems Support Officer is not responsible for any changes to the Change Request Form or the Asset/MST data within the spreadsheet Templates.

Note 3: All change requests are to be checked by the AMMSA or ASSO before data will be loaded into the Asset Management System.

Note 4: When completing the asset data load templates for the addition of new assets, the relevant Data Management Guideline (civil or signal) should be followed

Note 5: When changes to the infrastructure result in the asset being made redundant but remains a part of the corridor, the change request initiator is to ensure the "Update Redundant Equipment" box is checked on the authorisation form. Then if applicable, make relevant comments into the section provided. The equipment status in the Asset Management System and Works Management System will be identified with a Maintenance Scheduled Task applied for the management and maintenance of controls.

1.6.2 Asset Data Administrator

1. Provide the Change Request Initiator with a list of outstanding Work Orders and Defects applicable to the asset change works.
2. Ensure MST changes are correct, as per paragraph 1.5.2.2
3. Ensure that any outstanding work orders/defects currently recorded against the equipment that is being replaced are closed and that the NAN number is recorded against these work orders as a Reference Code.

1.6.3 Asset Systems Support Officer

1. Provide the Change Initiator, on the Equipment and MST data load templates, the current asset data applicable to the asset change works.
2. Check the data of Equipment and MST contained within the data load templates, supported by the approved Change Authorisation Form, before completing the load into the Asset Management System.

3. Update the Asset Management System as required. Provide finalised data load results to the local area ADA.
4. Sign the Change Authorisation Form to ensure the updates have been completed and return to the Change Initiator for their action to close out the item on the Configuration Change List.

1.6.4 Area Manager / Signal Maintenance Engineer / Structures Manager

1. Check change request Equipment and MST data with the Change Initiator to ensure that it is finalised and correct.

1.7 Reference Documents

The following documents support this procedure:

- ARTC Rail Referencing Document and General Naming Conventions
 - Data Management Guideline No. 2 – Signal Equipment
 - Data Management Guideline No. 3 – Track & Civil Equipment
- EGP-03-01 Rail Network Configuration Management
- ETE-00-03 Civil Technical Maintenance Plan

2 Appendix A: Change Authorisation Form



FORM

EGP0302F-01

CHANGE AUTHORISATION FORM

Parent Procedure: EGP-03-02 Equipment Register – Updating and Maintenance

Equipment Register / MST Change Authorisation Form		NAN No:
Comments:		
EQUIPMENT		
<input type="checkbox"/> Add New Equipment	<input type="checkbox"/> Update Existing Equipment	<input type="checkbox"/> Remove Equipment
<input type="checkbox"/> Update Redundant Equipment		
Equipment No.:	Plant No. (SPN):	Equipment Class:
Route:	Base Code:	Account Code:
Kms From (3 Decimal Mandatory):	Kms To (3 Decimal Mandatory):	
GPS longitude:	GPS Latitude:	
Equipment Description First Line – For multiple changes write "SEE ATTACHED SPREADSHEET"		
Equipment Description Second Line		
MAINTENANCE SCHEDULE TASK (MST)		
<input type="checkbox"/> Add New MST	<input type="checkbox"/> Update Existing MST	<input type="checkbox"/> Make MST Inactive Schedule 9
Maintenance Schedule Task Number:	Standard Job Number for new MST:	
<input type="checkbox"/> Technical Maintenance Plan for bulk plan changes: NOTE: MST changes for TMP Plan must be in MST Load Template Format		
New Equipment Only - Date Installed:		
Task Number:	Latitude %:	Work Group:
Select discipline: Civil / Electrical / Signals / Track / Structures		Schedule Service:
Schedule Indicator (<input type="checkbox"/> 1, <input type="checkbox"/> 3 or <input type="checkbox"/> Other):	Frequency (Days):	Next Schedule Date:
REQUESTOR / APPROVAL DETAILS – (circle applicable position title or add details as required)		
Change Request Initiator Name:	Position Title:	
Signature:	Date:	
Changes certified correct Name:	Area Mgr / Signal Maint Eng / Structures Mgr	
Signature:	Date:	
Changes approved Name:	Corridor / Maintenance Mgr:	
Signature:	Date:	
EQUIPMENT REGISTER UPDATED		
Name:	ADA / AMMSA / ASSO:	
Signature:	Date:	

3 Appendix A1: Sample Change Authorisation Form



FORM

EGP0302F-01

CHANGE AUTHORISATION FORM

Parent Procedure: EGP-03-02 Equipment Register – Updating and Maintenance

Equipment Register / MST Change Authorisation Form		NAN No: 1106	
Comments:			
EQUIPMENT			
<input type="checkbox"/> Add New Equipment	<input checked="" type="checkbox"/> Update Existing Equipment	<input type="checkbox"/> Remove Equipment	<input type="checkbox"/> Update Redundant Equipment
Equipment No.: 17660	Plant No. (SPN): S80PT10074640.03018A	Equipment Class:	PT
Route: S80	Base Code: 10074	Account Code:	0782
Kms From (3 Decimal Mandatory): 640.030		Kms To (3 Decimal Mandatory): 640.030	
GPS longitude: 134.55781361	GPS Latitude: -30.71180373		
Equipment Description First Line – For multiple changes write “SEE ATTACHED SPREADSHEET”			
POINTS 18A MECHANICAL SELECTOR			
Equipment Description Second Line			
MAINTENANCE SCHEDULE TASK (MST)			
<input type="checkbox"/> Add New MST	<input checked="" type="checkbox"/> Update Existing MST	<input type="checkbox"/> Make MST Inactive Schedule 9	
Maintenance Schedule Task Number: 0001	Standard Job Number for new MST: S07327		
<input type="checkbox"/> Technical Maintenance Plan for bulk plan changes: NOTE: MST changes for TMP Plan must be in MST Load Template Format			
New Equipment Only - Date Installed:			
Task Number:	Latitude %: 46	Work Group: 971SIG	
Select discipline: Civil / Electrical / Signals / Track / Structures		Schedule Service: 3	
Schedule Indicator (<input type="checkbox"/> 1, <input type="checkbox"/> 3 or <input type="checkbox"/> Other):	Frequency (Days): 30	Next Schedule Date: 09/09/2015	
REQUESTOR / APPROVAL DETAILS – (circle applicable position title or add details as required)			
Change Request Initiator Name:		Position Title:	
Signature:		Date:	
Changes certified correct Name:		Area Mgr / Signal Maint Eng / Structures Mgr	
Signature:		Date:	
Changes approved Name:		Corridor / Maintenance Mgr:	
Signature:		Date:	
EQUIPMENT REGISTER UPDATED			
Name:		ADA / AMMSA / ASSO:	
Signature:		Date:	

4 Appendix A2: Change Authorisation Form Nomenclature

4.1 Equipment

Add/New Equipment - mark with ✓ when requesting the addition of new assets to the Asset Maintenance System.

Update Existing Equipment - mark with ✓ when requesting changes to Assets that already exist in the Asset Maintenance System.

Remove Equipment - mark with ✓ when requesting that an existing Asset is required to be:

SW - Service Withdrawn,

PR - Project Replacement,

NM - Not Maintained

DI - Disposed Of

See APPENDIX A4, EQUIPMENT STATUS.

Update Redundant Equipment – mark with ✓ when changes to the infrastructure result in an Asset that already exists in the Asset Maintenance System being made redundant.

Equipment Number - must be entered when requesting a change to a single Asset - Leave blank when requesting new or multiple Assets - the Asset Number for a new Asset will be allocated by the system during the load process.

Structured Plant Number (SPN) - can be entered in place of the Equipment Number or when requesting a new Asset.

Route - Entered when requesting new single Asset.

Kilometres from - Mandatory - Asset start kilometrage for continuous assets. For point assets use the point kilometrage location.

Kilometres to - Mandatory - Asset end kilometrage for continuous assets.

Base Code - the Base Code track section the Asset belongs to.

Account Code - the Account code that belongs to the track segment. This is a mandatory field for the creation of assets within the Asset Maintenance System

Equipment Class - the equipment class that the Asset belongs to - see Equipment Class list (Appendix A3)

GPS Longitude – Double precision number (3, 8) - ie, 3 numbers, then a decimal point followed by a further 8 numbers. For example, 134.55781361 taken from the Centre Line Point of the track perpendicular to the asset.

GPS Latitude - Double precision number (2, 8) - ie, (negative) 2 numbers, then a decimal point followed by a further 8 numbers. For example, -30.71180373 taken from the Centre Line Point of the track perpendicular to the asset.

Equipment Description First Line - used for single or multiple line requests - The name is derived from the Asset Naming Convention Document Draft.

Equipment Description Second Line - Kilometrage for Continuous Asset or additional asset information

Comments – can be used for entering comments relevant to the requested change.

4.2 MST

Add/New MST - mark ✓ when requesting the addition of a new single asset MST or multiple asset MSTs within the Asset Maintenance System.

Update Existing MST - mark ✓ when requesting changes to existing MSTs in the Asset Maintenance System.

Make MST Inactive Sch 9 - to remove an MST when an Asset no longer requires maintaining or is withdrawn from maintenance for replacement or project work, this will prevent any further work orders being generated.

Technical Maintenance Plan (TMP) - for bulk Plan Changes Civil Track - Signals - Electrical - Other when requesting the start of/or change to an existing Technical Maintenance Plan normally require changes to a large number of MSTs.

MST Changes for TMP must be in MST Load Template Format - requires the completion of the data load MST Template, as per Note 1.

Schedule Indicator - The Schedule Indicator that drives the way the schedule is called for maintenance cycles.

ARTC usually use 1 - Last Schedule Date or 3 - The Last Performed Date.

Last Schedule Date is the last date the MST was committed and a work order was generated.

Last Performed Date is the date that the asset was last inspected/maintained.

Work Group - the group or discipline that performs the maintenance.

Frequency Days - The days between each schedule period of time that the Asset requires Inspecting/Maintaining.

Latitude % - The variation in the number of days in which an Asset can be Inspected/Maintained from the Next Schedule Date. This can be a Positive or Negative number of days.

Next Schedule Date - This is system mandatory when setting up a new MST or when changing the current schedule days.

4.3 Signature Block

First Block - Change Request Initiator. The authorised person who is responsible for requesting a change to the Asset Maintenance System.

Second Block - Changes certified correct - Team Manager - Signal Maintenance Engineer – Structures Manager. The person who is authorised to check and approve the changes.

Third Block - Changes approved by the Delivery Manager.

Fourth Block - Equipment Register Updated - ADA - AMMSA – ASSO. The person who updates the Asset Maintenance System.

5 Appendix A3: Equipment Class

5.1 Class and Description

CLASS CODE	CLASS DESCRIPTION	ASSOCIATED
AS	AIRSTRIPS	
BF	BUILDINGS/FACILITIES	CIVIL
BR	BRIDGES	CIVIL
BT	BALLAST TOP	
CB	CRN BOOKED OUT	
CD	CRN DISPOSED OF	
CG	CRN WITHIN GROUP MST	
CI	CRN IN SERVICE	
CN	CRN NOT MAINTAINED	
CO	COMPONENT	
CP	CRN PART MAINTAINED	
CS	CONTROL SYSTEM	
CU	CULVERT	CIVIL
CW	CRN SERVICES WITHDRAWN	
DG	SUB-SURFACE DRAINAGE	CIVIL
DN	DISTRIBUTION SS	
EC	CALIBRATED EQUIPMENT	CIVIL
EI	INCIDENTS/MISC WORK	
EN	ENCLOSURE	
FN	FENCING	CIVIL
FP	FIXED PLANT	
IN	INTERLOCKING	
LC	LEVEL CROSSING	
LR	LINE ROUTES	SIGNAL
LX	LEVEL CROSSING (SIGNAL)	SIGNAL
MP	MOBILE PLANT	
MS	MISCELLANEOUS STRUCTURES	CIVIL
NS	NON-SAFETY CRITICAL EQUIP	
PE	MINOR PLANT & EQUIPMENT	

PL	MISC. POLES	ELECTR
PO	POWER SUPPLY	
PS	PERMANENT SIGNS	
PT	POINTS	
PU	PEDESTRIAN PUBLIC	
RG	REPORTING	
RL	RAIL LUBRICATORS	CIVIL
RS	ROLLING STOCK	
RV	ROAD VEHICLE	
RW	RIGHT OF WAY	CIVIL
SE	SIG EQUIPMENT	SIGNAL
SG	SIGNALS VIC SA WA ONLY	
SL	SIG LOCATION	SIGNAL
SQ	SUBS EQUIPMENT	ELECTR
ST	STATION	CIVIL
TD	TRAIN DETECTION	
TE	TARGET EQUIP	
TL	T/LINE FEEDER	ELECTR
TO	TURNOUT	CIVIL
TR	TRACK	CIVIL
TS	T/LINE STRUCTURE	ELECTR
TU	TUNNELS	CIVIL
WS	WAYSIDE DEVICES	
WT	WORKSHOP TOOLS & EQUIP	
XX	OBSOLETE EQUIPMENT	
ZZ	TRANSFER EQUIPMENT	

6 Appendix A4: Equipment Status

1	BO	BOOKED OUT	Equipment is temporarily booked out for replacement or maintenance
2	DE	DECOMMISSIONED	Not to be used - This will be removed from Table File
3	DI	DISPOSED OF	Equipment has been completely removed
4	GM	WITHIN GROUP MST	Equipment service schedule is grouped in with those of other common equipment components Example - Mechanical Points where the service schedule is included in the MST for the Ground Frame Example - Catch Points where the inspection is included in the MST for the turnout Example - Fencing where the inspection is included in the MST for Detailed Walking
5	IS	IN SERVICE	Equipment is being used and maintained by ARTC
6	NM	NOT MAINTAINED	Equipment exists, but is maintained by others i.e. Private, RailCorp <i>To be used when a line or a section of line has been removed from service and does not require maintenance by ARTC</i> Example - Culvert Culvert W50CU10148SNG_L_253.061 RYLSTONE CULVERT Example – Track Siding Track Siding PW020000 TRAJERE GRAIN SIDING does not require maintaining
7	PM	PARTIALLY MAINTAINED	Equipment that has been withdrawn from Service – Equipment that requires <u>maintaining</u> or equipment that requires only occasional or partial maintenance
8	PN	PROJECT NEW	Equipment that is being brought into service - As part of a Project or Replacement of existing equipment and hence requires a new Asset Number. To be held in this Equipment Status until Commissioned, the Equipment Status should then be changed to IS – In Service
9	PR	PROJECT REPLACEMENT	Equipment that is being replaced – As a part of a Project or Replacement Program that no longer requires maintaining. Once the equipment has been Removed then it should be changed to Equipment Status DI – Disposed Of
10	SO	SEASONAL ONLY	Not currently used by ARTC _Will be Removed from Table File
11	SW	SERVICE WITHDRAWN	Equipment has been withdrawn from service – The equipment does not require maintaining. This Status is for assets identified as owned by ARTC and cannot be moved to Status NM – Not Maintained