

# Data Classification – Signal Systems

EGW-10-03

## Applicability

ARTS Network Wide	SMS
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## Publication Requirement

Internal / External
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## Primary Source

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## Document Status

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Amendment Version #	Date Reviewed	Clause	Description of Amendment
1.0	30 Apr 19		First Issue. Signals inventory conventions for Ellipse.

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## 1 Introduction

### 1.1 Purpose

The purpose of this work instruction is to provide a set of rules for describing signalling system assets, in the Asset Management System. This includes communication assets associated with the signalling system. Ellipse is the current ARTC Asset Management System.

### 1.2 Scope

This work instruction covers the signalling system asset data requirements for the following aspects of Ellipse:

- Equipment Register
- MST input

The rules stated in this document shall be adhered to when entering or managing signal system equipment data within Ellipse.

### 1.3 Document Owner

The General Manager Technical Standards is the document owner and the initial point of contact for all queries relating to this work instruction.

The document owner shall be responsible for approving any changes to the framework used to describe (or work with) signals assets in Ellipse, as described in this document. Any approved changes shall be reflected in this document before the change is implemented in Ellipse.

### 1.4 Relevant Procedures

This work instruction supports the following ARTC Standards and Procedures:

- Signal Procedures
- Signal Technical Maintenance Plan (TMP)
- EGP-10-01 Asset Maintenance Works Management
- EGP-10-02 Asset Maintenance Works Management Procedures

*Note: Until the documents listed above are brought up to date with Ellipse, this document shall take precedence over any clause relating to the Asset Management System, Signals Management System. In the event any confusion or contradiction occurs the owner of this document shall be contacted for clarification.*

### 1.5 Responsibilities

The Corridor Manager is responsible for the implementation of this work instruction.

The Asset Assurance Manager (Interstate) is responsible for managing the process.

The Signal Asset Manager (Interstate Network) and Senior Signal and Systems Engineer (Hunter Valley) are responsible for the maintenance of this work instruction.

## 1.6 Reference Documents

The following documents support this procedure:

- Equipment Register – Updating and Maintenance EGP-03-02

## 1.7 Definitions

The following terms and acronyms are used within this document.

Term or Acronym	Description
ARTC	Australian Rail Track Corporation Ltd.
Attribute	Single component of an assets record. Similar to a database field.
Controlled Attribute	An attribute that can only contain limited data types, i.e. from a list
Equipment Record	Record of assets generic data attributes. Located in MSE600.
Inspection Script	A computer script within the mobility application that defines and guides the user through the inspection tasks. Note: not currently available.
Responsible Manager	ARTC personnel with designated responsibility for management of the (signals) asset. Typically the Signals Asset Manager.
SPN	Structured Plant Number (also known as Plant Number).
TMP	Technical Maintenance Plan.
Uncontrolled Attribute	An attribute that can hold any data (subject to character limit).
[MSE010]	Search Table.
[MSE600]	Equipment Register.
[MSE541]	Work Requests.
[MSEWLA]	Attributes Link.
[MSEWDA]	Alarms and Defects.
[MSWWOT]	Work Order.
[MSEWJO]	Jobs.

**Table 1: Definitions**

### 1.7.1 A Note on Nomenclature

The term 'system' is used in a number of different contexts in this document. Ellipse is referred to as the Asset Management System. This is distinct from an Asset Management System as defined by ARTC's standards and procedures. From a technical standards perspective, Ellipse is a tool for the implementation of the 'system' as defined by ARTC standards and procedures.

Information enclosed in square parenthesis, i.e. [MSE600], is Ellipse specific and relates to the core modules that provide functionality. These modules can be accessed in Ellipse by entering the contained code in the quick launch box in the top right hand corner, as shown in Figure 1 below).

## 2 Equipment Register

The Equipment Register [MSE600] is the primary repository of asset data in Ellipse. The data stored in this module drives the functionality of the other modules in Ellipse.

Only attributes that are currently in use for signals assets will be detailed in this work instruction.

Users shall adhere to the Common equipment Guide as described in EGW-10-02. Additional requirements specific to Signals are provided in the following clauses.

### 2.1 Equipment Number

The Equipment Number is a controlled attribute. It contains a 12-digit number that is the unique identifier for equipment in Ellipse. An example of a valid Equipment Number would be '000000038276'.

It should be noted that whilst the Equipment Number and SPN (refer to section on SPN) can often be used interchangeably to identify a specific asset, it is theoretically possible for two assets to share the same SPN - i.e. when equipment is disposed of and replaced on a like for like basis. Only the Equipment Number is unique.

The equipment number is provided by the system administrator.

### 2.2 Structured Plant Number

The ARTC Structured Plant Number (Also known as the SPN) is the non-unique identifier for an equipment record. The SPN is a controlled value attribute that is derived from the data stored in up to 6 'plant segments'. When using Excel the SPN is located or entered under the column title "**Equipment Ref**".

When an equipment records Equipment Class is changed, new SPN data must also be supplied.

All Signals Equipment Classes shall use the following SPN format using 5 plant segments, which shall be derived as follows:

Order	Field	Size	Mandatory	Validation
1	Corridor	3	Y	Y
2	Base Code	5	Y	Y
3	KM	8	Y	Y
4	Function (Class)	2	Y	Y
5	Equipment Name	10	Y	Y

Examples of a valid SPN would be S00100440147.955SG15G made up of the following segments:

Segment		
1	S00	South Corridor – (Sydney to Craigieburn)
2	10044	Goulburn
3	0147.955	Discrete Kilometrage
4	SG	Equipment or Asset Class e.g. SG - Signal
5	15G	Identifier (Equipment Name)

## 2.3 Equipment Description 1 and 2 or Item Name 1 and 2

The Description is an uncontrolled attribute. It comprises two lines of free text, located above the tabbed sub-frames in the equipment record. The purpose of the Description is to provide an easy visual indication of what the asset is. The Description is a searchable attribute in the equipment record that may be used to define a search in conjunction with any other searchable attributes in the 'Primary Search' or 'Advanced Search' tabs. It is recommended that the description attribute be used to reference any data not contained in these attributes for ease of asset identification.

The recommended Description format for Equipment Description 1 or Item Name 1 is as described below by equipment class and EGI. Keeping in mind the combined total including spaces is limited to 40 characters. Broadly description 1 includes the Location, Parent Enclosure and Equipment Name.

### Determination of Location

- Location of the asset (using 3 letter identifier)
  - This is determined from the column "EQUIP LOCATION" in Ellipse.  
E.g. if the location is "Goulburn" then we use the 3 letter identifier GLB

### Determination of Parent Enclosure

- Parent Enclosure is the signalling location that houses the equipment.
  - If the enclosure name is numerical or alpha numerical the word "LOC" is to be added directly after to separate any numerical equipment names in the description 1. An example is GN5 is the name of the Enclosure, this is to be entered as GN5 LOC or 103 enclosure should be entered as 103 LOC followed by the equipment name
  - **Note 1:** *If the enclosure is a relay room the letters RR are to be used in place of LOC.*
  - **Note 2:** *If the enclosure or location (LOC) has a different reference on the signal plan then this may be used. E.g. ZB for zone box is commonly used in Victoria.*

#### Description 1 Examples below

- GLB GN5 LOC (equip. name)
- GLB GN5 RR (equip. name)
- GLB GN5 ZB (equip. name)

The Description format for Equipment Description 2 or Item Name 2 is as described below by equipment class and EGI. Keeping in mind the combined total including spaces is limited to 40 characters all options are limited to those in this document. Broadly description 2 is the EGI description.

### 2.3.1 Control Systems

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Control System Operator Local Panel

EGI Code CS0101

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2	LOCAL CONTROL PANEL	
Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC LCP	LOCAL CONTROL PANEL
	HBJ HJ RR LCP	LOCAL CONTROL PANEL
Control System Territory Phoenix		EGI Code CS0111
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	CONTROL SYSTEMS TERRITORY PHOENIX	
Examples	Item Description 1	Item Description 2
	BMD NCCS NTH 1 PHOENIX	CONTROL SYSTEMS TERRITORY PHOENIX
	JUN NCCS STH1 PHOENIX	CONTROL SYSTEMS TERRITORY PHOENIX
Control System Territory PTOS		EGI Code CS0112
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	CONTROL SYSTEMS TERRITORY PTOS	
Examples	Item Description 1	Item Description 2
	BMD NCCS NTH 3 PTOS	CONTROL SYSTEMS TERRITORY PTOS
	JUN NCCS STH 4 PTOS	CONTROL SYSTEMS TERRITORY PTOS
Control System Territory TMACS		EGI Code CS0113
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	CONTROL SYSTEMS TERRITORY TMACS	
Examples	Item Description 1	Item Description 2
	BMD NCCS NTH TMACS	CONTROL SYSTEMS TERRITORY TMACS
	JUN NCCS STH TMACS	CONTROL SYSTEMS TERRITORY TMACS
Control System Equipment Monitor 4Site		EGI Code CS0121
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	EQUIPMENT MONITOR 4SITE	
Examples	Item Description 1	Item Description 2
	BMD NCCS 4SITE	EQUIPMENT MONITOR 4SITE
Control System Equipment Monitor Points		EGI Code CS0122
Item Description 1	Location + Enclosure + Equipment Name	



Item Description 2      EQUIPMENT MONITOR POINTS

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC EQP MON PTS	EQUIPMENT MONITOR POINTS
	HBJ HJ RR EQP MON PTS	EQUIPMENT MONITOR POINTS

Control System Equipment Monitor WAM EGI Code CS0123

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      EQUIPMENT MONITOR WAM

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC EQP MON WAM	EQUIPMENT MONITOR WAM
	HBJ HJ RR EQP MON WAM	EQUIPMENT MONITOR WAM

Control System Equipment Monitor Maintenance Terminal EGI Code CS0124

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      EQUIPMENT MONITOR MAINT. TERMINAL

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC EQP MON TERM	EQUIPMENT MONITOR MAINT. TERMINAL
	HBJ HJ RR EQP MON TERM	EQUIPMENT MONITOR MAINT. TERMINAL

## 2.3.2 Telemetry

Telemetry FDM EGI Code TM0201

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TELEMETRY FDM

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC FDM	TELEMETRY FDM
	GLB GB RR FDM	TELEMETRY FDM

Telemetry iMAC EGI Code TM0202

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TELEMETRY iMAC

	Item Description 1	Item Description 2
	HBJ 104.2 LOC iMAC	TELEMETRY iMAC
Examples	GLB GB RR iMAC	TELEMETRY iMAC

Telemetry Kingfisher EGI Code TM0203

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TELEMETRY KINGFISHER

	Item Description 1	Item Description 2
	HBJ 104.2 LOC KF	TELEMETRY KINGFISHER
Examples	BMD NCCN MS1 KF	TELEMETRY KINGFISHER
	GLB GB RR KF	TELEMETRY KINGFISHER

Telemetry Moscad EGI Code TM0204

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TELEMETRY MOSCAD

	Item Description 1	Item Description 2
	HBJ 104.2 LOC MOSCAD	TELEMETRY MOSCAD
Examples	BMD NCCN MS1 MOSCAD	TELEMETRY MOSCAD
	GLB GB RR MOSCAD	TELEMETRY MOSCAD

Telemetry ICAPS EGI Code TM0205

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TELEMETRY ICAPS

	Item Description 1	Item Description 2
	HBJ 104.2 LOC ICAPS	TELEMETRY ICAPS
Examples	BMD NCCN MS1 ICAPS	TELEMETRY ICAPS
	GLB GB RR ICAPS	TELEMETRY ICAPS

### 2.3.3 Level Crossings

**Note 1:** If the Enclosure carries the same name as the crossing then only the location and crossing name are required in Item description 1. The equipment name is the level crossing name.

**Note 2:** The following abbreviations **are** to be used for consistency.

- Road – RD
- Street – ST
- Highway – HWY
- Lane – LN

**Note 3:** The following abbreviations may be used, if space requirements are an issue, for consistency.

- PEDESTRIAN CROSSING - PED XING
- LEVEL CROSSING – LXING

Level Crossing Monitored RX-5 Lights		EGI Code LX0301
Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	
Item Description 2	MON RX-5 LIGHTS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HWY LEVEL CROSSING	MON RX-5 LIGHTS
	GLB EAST ST LEVEL CROSSING	MON RX-5 LIGHTS
	GLB GN4 LOC EAST ST LXING	MON RX-5 LIGHTS
Level Crossing Monitored RX-5 Lights & Booms		EGI Code LX0302
Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	
Item Description 2	MON RX-5 LIGHTS & BOOMS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HWY LEVEL CROSSING	MON RX-5 LIGHTS & BOOMS
	GLB EAST ST LEVEL CROSSING	MON RX-5 LIGHTS & BOOMS
	GLB GN4 LOC EAST ST LXING	MON RX-5 LIGHTS & BOOMS
Level Crossing Monitored RX-12 Pedestrian Lights		EGI Code LX0303
Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	
Item Description 2	MON RX-12 PED LIGHTS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HWY PED CROSSING	MON RX-12 PED LIGHTS
	GLB EAST ST PED CROSSING	MON RX-12 PED LIGHTS
	GLB GN4 LOC EAST ST LXING	MON RX-12 PED LIGHTS
Level Crossing Monitored RX-12 Pedestrian Lights & Booms		EGI Code LX0304
Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	

Item Description 2	MON RX-12 PED LIGHTS & BOOMS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HWY PED CROSSING	MON RX-12 PED LIGHTS & BOOMS
	GLB EAST ST PED CROSSING	MON RX-12 PED LIGHTS & BOOMS
	GLB GN4 LOC EAST ST LXING	MON RX-12 PED LIGHTS & BOOMS
Level Crossing Monitored Supplementary Lights		EGI Code LX0305
Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	
Item Description 2	MON SUPPLEMENTRY LIGHTS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HWY LEVEL CROSSING	MON SUPPLEMENTRY LIGHTS
	GLB EAST ST LEVEL CROSSING	MON SUPPLEMENTRY LIGHTS
	GLB GN4 LOC EAST ST LXING	MON SUPPLEMENTRY LIGHTS
Level Crossing Non Monitored RX-5 Lights		EGI Code LX0311
Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	
Item Description 2	NON-MON RX-5 LIGHTS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HWY LEVEL CROSSING	NON-MON RX-5 LIGHTS
	GLB EAST ST LEVEL CROSSING	NON-MON RX-5 LIGHTS
	GLB GN4 LOC EAST ST LXING	NON-MON RX-5 LIGHTS
Level Crossing Non Monitored RX-5 Lights & Booms		EGI Code LX0312
Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	
Item Description 2	NON-MON RX-5 LIGHTS & BOOMS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HWY LEVEL CROSSING	NON-MON RX-5 LIGHTS & BOOMS
	GLB EAST ST LEVEL CROSSING	NON-MON RX-5 LIGHTS & BOOMS
	GLB GN4 LOC EAST ST LXING	NON-MON RX-5 LIGHTS & BOOMS
Level Crossing Non Monitored RX-12 Pedestrian Lights		EGI Code LX0313
Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	
Item Description 2	NON-MON RX-12 PED LIGHTS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HWY LEVEL CROSSING	NON-MON RX-12 PED LIGHTS
	GLB EAST ST LEVEL CROSSING	NON-MON RX-12 PED LIGHTS
	GLB GN4 LOC EAST ST LXING	NON-MON RX-12 PED LIGHTS
Level Crossing Non Monitored RX-12 Pedestrian Lights & Booms		EGI Code LX0314

Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	
Item Description 2	NON-MON RX-12 PED LIGHTS & BOOMS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HW PED CROSSING	NON-MON RX-12 PED LIGHTS & BOOMS
	GLB EAST ST PED CROSSING	NON-MON RX-12 PED LIGHTS & BOOMS
	GLB GN4 LOC EAST ST LXING	NON-MON RX-12 PED LIGHTS & BOOMS
Level Crossing Non Monitored Supplementary Lights		EGI Code LX0315
Item Description 1	Location + Enclosure (added only if different to xing name) + Equipment Name	
Item Description 2	NON-MON SUPPLEMENTRY LIGHTS	
Examples	Item Description 1	Item Description 2
	GLB YELLOW HWY LEVEL CROSSING	NON-MON SUPPLEMENTRY LIGHTS
	GLB EAST ST LEVEL CROSSING	NON-MON SUPPLEMENTRY LIGHTS
	GLB GN4 LOC EAST ST LXING	NON-MON SUPPLEMENTRY LIGHTS

## 2.3.4 Signals

**Note 1:** The following Signal Type abbreviations are to be used in Description 1 for consistency.

- Buffer Stop - BFST
- Co-Actor - CO-AC
- Distant - DIST
- Enhancer - ENHR
- Guards Indicator - GDS IND
- Main Line Indicator - MLI
- Points Indicator - PTS IND
- Repeater - REPT
- Shunt - SHNT
- Warning Light - WRN LT

**Note 2:** with regards to Signs If there is no enclosure in the vicinity then this is not required.

Signal Incandescent		EGI Code SG0401
Item Description 1	Location + Enclosure + Equipment Name + Type (abbreviation) + SIG	
Item Description 2	SIGNAL INCANDESCENT SIGNAL INCANDESCENT BUFFER STOP SIGNAL INCANDESCENT CO-ACTOR SIGNAL INCANDESCENT DISTANT SIGNAL INCANDESCENT ENHANCER SIGNAL INCANDESCENT GUARDS INDICATOR SIGNAL INCANDESCENT MLI SIGNAL INCANDESCENT POINTS INDICATOR SIGNAL INCANDESCENT REPEATER SIGNAL INCANDESCENT SEARCHLIGHT SIGNAL INCANDESCENT SHUNT SIGNAL INCANDESCENT WARNING LT	
Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC HJ42 SIG	SIGNAL INCANDESCENT
	HBJ 104.2 LOC HJ42 DIST SIG	SIGNAL INCANDESCENT DISTANT
	HBJ 104.2 LOC HJ42 REPT SIG	SIGNAL INCANDESCENT REPEATER
	HBJ HJ RR HJ21 SIG	SIGNAL INCANDESCENT

Signal LED		EGI Code SG0402
Item Description 1	Location + Enclosure + Equipment Name + Type (abbreviation) + SIG	
Item Description 2	SIGNAL LED SIGNAL LED BUFFER STOP SIGNAL LED CO-ACTOR SIGNAL LED DISTANT SIGNAL LED ENHANCER	

SIGNAL LED GUARDS INDICATOR  
 SIGNAL LED MLI  
 SIGNAL LED POINTS INDICATOR  
 SIGNAL LED REPEATER  
 SIGNAL LED SHUNT  
 SIGNAL LED WARNING LT

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC HJ42 SIG	SIGNAL LED
	HBJ 104.2 LOC HJ42 DIST SIG	SIGNAL LED DISTANT
	HBJ 104.2 LOC HJ42 REPT SIG	SIGNAL LED REPEATER
	HBJ HJ RR HJ21 SIG	SIGNAL LED

Signal Mechanical EGI Code SG0411

Item Description 1      Location + Enclosure + Equipment Name + Type (abbreviation) + SIG

Item Description 2      SIGNAL MECHANICAL SEMAPHORE

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC HJ42 SIG	SIGNAL MECHANICAL SEMAPHORE
	HBJ HJ RR HJ21 SIG	SIGNAL MECHANICAL SEMAPHORE

Signal Noticeboard/Sign EGI Code SG0421

Item Description 1      Location + Enclosure (IF APPLICABLE) + Equipment Name + BD

Item Description 2      SIGN AXLE COUNTER BOARD  
 SIGN BEGIN YARD LIMITS  
 SIGN CATCHPOINT  
 SIGN DERAIL  
 SIGN END TRAIN ORDER  
 SIGN END YARD LIMITS  
 SIGN LANDMARK  
 SIGN LOCATION BOARD  
 SIGN SHUNT LIMIT  
 SIGN START TRAIN ORDER  
 SIGN STOPBOARD  
 SIGN SUPERFREIGHTER  
 SIGN YARD LIMIT

	Item Description 1	Item Description 2
Examples	HBJ HJ RR SHUNT LIMIT DN MN BD	SIGN SHUNT LIMIT
Examples	DEN 168P LOC UP MAIN SIDING STOP BD	SIGN STOPBOARD
	HBJ HJ RR C FRAME DERAIL BD	SIGN DERAIL

### 2.3.5 Interlockings

**Note 1 :** EGI Code IN0511 -The following abbreviations are to be used in Description 1 for consistency for Microlok and can be applied to other CBIs

- Mains – MNS
- Coals - CLS
- Interlocking - INT
- Input/Output - IO
- Train Control System - TCS
- Master - MSTR
- Slave – SLV

**Note 2:** EGI Code IN0501 & EGI Code IN0502 - AC & DC shelf EGIs are for relays not operated by a track circuit

**Note 3:** EGI Code IN0503 – This number is to be utilised to cover a group of relays such as those in relay rooms

**Note 4:** A main frame is frame containing numerous levers to operate multiple pts and or signals.

Int. Relay AC Shelf		EGI Code IN0501
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	RELAY AC SHELF	
Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC RELAY INT	RELAY AC SHELF
	TON TN RR RELAY INT	RELAY AC SHELF
Int. Relay DC Shelf		EGI Code IN0502
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	RELAY DC SHELF	
Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC RELAY INT	RELAY DC SHELF
	TON TN RR RELAY INT	RELAY DC SHELF
Int. Relay Miniature Plug In		EGI Code IN0503
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	RELAY MINIATURE PLUG IN	
Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC RELAY INT	RELAY MINIATURE PLUG IN
	TON TN RR RELAY INT	RELAY MINIATURE PLUG IN
Int. Relay Large Plug In (Line)		EGI Code IN0504



Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	RELAY LARGE PLUG IN	
Examples	Item Description 1 HBJ 104.2 LOC RELAY INT TON TN RR RELAY INT	Item Description 2 RELAY LARGE PLUG IN RELAY LARGE PLUG IN
<hr/>		
Int. CBI Microlok 2	EGI Code IN0511	
Item Description 1	Location + Enclosure + Equipment Name + MICROLOK	
Item Description 2	CBI MICROLOK II	
Examples	Item Description 1 HBJ 104.2 LOC INT MICROLOK TON TN RR MNS MICROLOK	Item Description 2 CBI MICROLOK II CBI MICROLOK II
<hr/>		
Int. CBI HIMA	EGI Code IN0512	
Item Description 1	Location + Enclosure + Equipment Name + HIMA	
Item Description 2	CBI HIMA	
Examples	Item Description 1 HBJ 104.2 LOC HIMA TON TN RR HIMA	Item Description 2 CBI HIMA CBI HIMA
<hr/>		
Int. CBI Westrace 1	EGI Code IN0513	
Item Description 1	Location + Enclosure + Equipment Name + WESTRACE	
Item Description 2	CBI WESTRACE 1	
Examples	Item Description 1 HBJ 104.2 LOC WESTRACE TON TN RR WESTRACE	Item Description 2 CBI WESTRACE 1 CBI WESTRACE 1
<hr/>		
Int. CBI Westrace 2	EGI Code IN0514	
Item Description 1	Location + Enclosure + Equipment Name + WESTRACE	
Item Description 2	CBI WESTRACE 2	
Examples	Item Description 1 HBJ 104.2 LOC WESTRACE TON TN RR WESTRACE	Item Description 2 CBI WESTRACE 2 CBI WESTRACE 2
<hr/>		
Int. CBI Electrolog IXS	EGI Code IN0515	

Item Description 1	Location + Enclosure + Equipment Name + IXS	
Item Description 2	CBI ELECTROLOG IXS	
Examples	Item Description 1 HBJ 104.2 LOC IXS TON TN RR IXS	Item Description 2 CBI ELECTROLOG IXS CBI ELECTROLOG IXS
<hr/>		
Int. CBI Westlok	EGI Code IN0516	
Item Description 1	Location + Enclosure + Equipment Name + WESTLOCK	
Item Description 2	CBI WESTLOC	
Examples	Item Description 1 HBJ 104.2 LOC WESTLOCK TON TN RR WESTLOCK	Item Description 2 CBI WESTLOCK CBI WESTLOCK
<hr/>		
Int. CBI VHLC	EGI Code IN0517	
Item Description 1	Location + Enclosure + Equipment Name + VHLC	
Item Description 2	CBI VHLC	
Examples	Item Description 1 HBJ 104.2 LOC VHLC TON TN RR VHLC	Item Description 2 CBI VHLC CBI VHLC
<hr/>		
Int. CBI EC4	EGI Code IN0518	
Item Description 1	Location + Enclosure + Equipment Name + EC4	
Item Description 2	CBI EC4	
Examples	Item Description 1 HBJ 104.2 LOC EC4 TON TN RR EC4	Item Description 2 CBI EC4 CBI EC4
<hr/>		
Int. CBI EC5	EGI Code IN0519	
Item Description 1	Location + Enclosure + Equipment Name + EC5	
Item Description 2	CBI EC5	
Examples	Item Description 1 HBJ 104.2 LOC EC5 TON TN RR EC5	Item Description 2 CBI EC5 CBI EC5
<hr/>		
Int. CBI VPI	EGI Code IN0521	

Item Description 1      Location + Enclosure + Equipment Name + VPI

Item Description 2      CBI VPI

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC VPI	CBI VPI
	TON TN RR VPI	CBI VPI

Int. CBI HD Link      EGI Code IN0522

Item Description 1      Location + Enclosure + Equipment Name + HD LINK

Item Description 2      CBI HD LINK

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC HD LINK	CBI HD LINK
	TON TN RR HD LINK	CBI HD LINK

Int. CBI SSI      EGI Code IN0523

Item Description 1      Location + Enclosure + Equipment Name + SSI

Item Description 2      CBI SSI

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC SSI	CBI SSI
	TON TN RR SSI	CBI SSI

Int. Mech Ground Frame      EGI Code IN0532

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      MECHANICAL GROUND FRAME

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC J FRAME	MECHANICAL GROUND FRAME
	TON TN RR G FRAME	MECHANICAL GROUND FRAME

Int. Mech Rel.      EGI Code IN0533

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      MECHANICAL RELEASE MAINTENANCE KEY B  
 MECHANICAL RELEASE HALF PILOT STAFF  
 MECHANICAL RELEASE DUPLEX LK  
 MECHANICAL RELEASE EMERGENCY

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC J FRAME REL	MECHANICAL RELEASE DUPLEX LK

TON TN RR G FRAME REL

MECHANICAL GROUND FRAME

### 2.3.6 Points

**Note 1:** The equipment name for points is determined by the points number followed by the turnout type. The following abbreviations are to be used in Description 1 for consistency.

- Points – PTS
- Swingnose - SNX
- Catchpoint - CPT
- Derail and Crowder - DRL

**Note 2:** Although Description 2 is fixed the makeup of the name is made by the following process

- Points Type + Model + Lock Type

**Note 3:** The following abbreviations are to be used in Description 1 for consistency.

- Releasing Switch – REL SW
- Switch Lock – SW LK

Points Combined M Series EGI Code PT0601

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS M3A INTERNAL LOCK  
 POINTS M23A INTERNAL LOCK  
 POINTS M2 INTERNAL LOCK  
 POINTS M2D INTERNAL LOCK  
 POINTS M70 INTERNAL LOCK

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 186A PTS HBJ HJ RR 143B PTS	POINTS M3A INTERNAL LOCK POINTS M23A INTERNAL LOCK

Points Combined HW Series EGI Code PT0602

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS HW4400 INTERNAL LOCK  
 POINTS HW4121 INTERNAL LOCK

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 186A PTS HBJ HJ RR 143B PTS	POINTS HW4400 INTERNAL LOCK POINTS HW4121 INTERNAL LOCK

Points Combined KA Series EGI Code PT0603

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS KA1200 INTERNAL LOCK  
 POINTS KA1211 INTERNAL LOCK  
 POINTS KA1401

Examples	Item Description 1 HBJ 104.2 LOC 186A PTS HBJ HJ RR 143B PTS	Item Description 2 POINTS KA1200 INTERNAL LOCK POINTS KA1211 INTERNAL LOCK
Points Solar Hydra Series		EGI Code PT0604
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	POINTS SOLAR HYDRA SERIES	
Examples	Item Description 1 HBJ 104.2 LOC C 186 PTS HBJ HJ RR 186 PTS	Item Description 2 POINTS SOLAR HYDRA SERIES POINTS SOLAR HYDRA SERIES
Points Derailer M Series		EGI Code PT0611
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	DERAILER M3A DERAILER M23A DERAILER M2 DERAILER M2D DERAILER M70	
Examples	Item Description 1 HBJ 104.2 LOC 186A DRL HBJ HJ RR 143B DRL	Item Description 2 DERAILER M3A DERAILER M23A
Points Derailer KA Series		EGI Code PT0612
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	DERAILER KA1200 DERAILER KA1211 DERAILER KA1401	
Examples	Item Description 1 HBJ 104.2 LOC 186A DRL HBJ HJ RR 143B DRL	Item Description 2 DERAILER KA1200 DERAILER KA1211
Points Derailer 84M Series		EGI Code PT0613
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	DERAILER 84M	
Examples	Item Description 1 HBJ 104.2 LOC 186A DRL HBJ HJ RR 143B DRL	Item Description 2 DERAILER 84M DERAILER 84M

Points Clamplock Hydraulic EGI Code PT0621

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS CLAMPLOCK

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 186A PTS	POINTS CLAMPLOCK HYDRAULIC

Points Clamplock Vossloh Series EGI Code PT0622

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS CLAMPLOCK VOSSLOH

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 186A PTS	POINTS CLAMPLOCK VOSSLOH

Points Clawlock 84M Series EGI Code PT0631

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS 84M CLAWLOCK  
SWINGNOSE 84M CLAWLOCK

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 186A PTS	POINTS 84M CLAWLOCK
	HBJ HJ RR 143B SNX	SWINGNOSE 84M CLAWLOCK

Points Clawlock S700 Series EGI Code PT0632

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS S700V CLAWLOCK  
POINTS S700K CLAWLOCK  
SWINGNOSE S700V CLAWLOCK  
SWINGNOSE S700K CLAWLOCK

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 186A PTS	POINTS S700V CLAWLOCK
	HBJ HJ RR 143B SNX	SWINGNOSE S700K CLAWLOCK

Points Spherolock 84M Series EGI Code PT0641

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS 84M SPHEROLOCK  
 SWINGNOSE 84M SPHEROLOCK

Examples	Item Description 1 HBJ 104.2 LOC 186A PTS HBJ HJ RR 143B SNX	Item Description 2 POINTS 84M SPHEROLOCK SWINGNOSE 84M SPHEROLOCK
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Points Spherolock S700 Series EGI Code PT0642

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS S700V SPHEROLOCK  
 POINTS S700K SPHEROLOCK  
 SWINGNOSE S700V SPHEROLOCK  
 SWINGNOSE S700K SPHEROLOCK

Examples	Item Description 1 HBJ 104.2 LOC 186A PTS HBJ HJ RR 143B SNX	Item Description 2 POINTS S700V SPHEROLOCK SWINGNOSE S700K SPHEROLOCK
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Points Mechanical EGI Code PT0651

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS MECHANICAL ELEC DET  
 POINTS MECHANICAL NO DET

Examples	Item Description 1 HBJ 104.2 LOC C FRAME A END PTS HBJ HJ RR J FRAME B END CATCH PTS	Item Description 2 POINTS MECHANICAL ELEC DET POINTS MECHANICAL NO DET
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Points Mechanical Derailer EGI Code PT0653

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS MECHANICAL DERAILER

Examples	Item Description 1 HBJ 104.2 LOC C FRAME B END DRL HBJ HJ RR J FRAME DRL	Item Description 2 POINTS MECHANICAL DERAILER POINTS MECHANICAL DERAILER
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Points Mechanical GRS EGI Code PT0654

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS MECHANICAL GRS

Examples	Item Description 1 HBJ 104.2 LOC C FRAME B END PTS	Item Description 2 POINTS MECHANICAL GRS
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HBJ HJ RR J FRAME PTS

POINTS MECHANICAL GRS

Points Releasing Switch EGI Code PT0661

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS RELEASING SWITCH

Examples	Item Description 1 HBJ 104.2 LOC C FRAME REL SW HBJ HJ RR J FRAME REL SW	Item Description 2 POINTS RELEASING SWITCH POINTS RELEASING SWITCH
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Points Releasing Switch Fortress EGI Code PT0662

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS RELEASING SWITCH FORTRESS

Examples	Item Description 1 HBJ 104.2 LOC C FRAME REL SW HBJ HJRR J FRAME REL SW	Item Description 2 POINTS RELEASING SWITCH FORTRESS POINTS RELEASING SWITCH FORTRESS
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Points Switchlock Westinghouse EGI Code PT0663

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS SWITCHLOCK WESTINGHOUSE

Examples	Item Description 1 HBJ 104.2 LOC C PTS SW LK HBJ HJ RR 12 PTS SW LK	Item Description 2 POINTS SWITCHLOCK WESTINGHOUSE POINTS SWITCHLOCK WESTINGHOUSE
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Points Switchlock Westinghouse HLM EGI Code PT0664

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS SWITCHLOCK WESTINGHOUSE HLM

Examples	Item Description 1 HBJ 104.2 LOC C PTS SW LK HBJ HJ RR 12 PTS SW LK	Item Description 2 POINTS SWITCHLOCK WESTINGHOUSE HLM POINTS SWITCHLOCK WESTINGHOUSE HLM
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Points Releasing PTOS Master Key Safe EGI Code PT0665

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      PTOS MASTER KEY SAFE

Item Description 1	Item Description 2
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Examples	HBJ 104.2 LOC PTOS MST KEY SF	PTOS MASTER KEY SAFE
	HBJ HJ RR PTOS MST KEY SF	PTOS MASTER KEY SAFE

Points Not commissioned/Seldom Used/Booked Out EGI Code PT0671

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      POINTS NOT COMM/SELDOM USED/BOOKED OUT

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 186 PTS	POINTS NOT COMM/SELDOM USED/BOOKED OUT
	HBJ HJ RR 143 PTS	POINTS NOT COMM/SELDOM USED/BOOKED OUT

### 2.3.7 Train Detection

Train Detection DC Standard EGI Code TD0701

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT DC

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 45AT	TRACK CIRCUIT DC
	HBJ HJ RR 104.9BT	TRACK CIRCUIT DC

Train Detection DC Shelf Type EGI Code TD0702

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT DC SHELF TYPE

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 45AT	TRACK CIRCUIT DC SHELF TYPE
	HBJ HJ RR 104.9BT	TRACK CIRCUIT DC SHELF TYPE

Train Detection DC Westrace/TD4 EGI Code TD0703

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT WESTRACE/TD4

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 45AT	TRACK CIRCUIT WESTRACE/TD4
	HBJ HJ RR 104.9BT	TRACK CIRCUIT WESTRACE/TD4

Train Detection HVI		EGI Code TD0711
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	TRACK CIRCUIT HVI JUEMONT SINGLE RAIL TRACK CIRCUIT HVI JUEMONT DOUBLE RAIL	
Examples	Item Description 1 HBJ 104.2 LOC 45AT HBJ HJ RR 104.9BT	Item Description 2 TRACK CIRCUIT HVI JUEMONT SINGLE RAIL TRACK CIRCUIT HVI JUEMONT DOUBLE RAIL
Train Detection AC		EGI Code TD0721
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	TRACK CIRCUIT AC	
Examples	Item Description 1 HBJ 104.2 LOC 45AT HBJ HJ RR 104.9BT	Item Description 2 TRACK CIRCUIT AC TRACK CIRCUIT AC
Train Detection CSEE		EGI Code TD0731
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	TRACK CIRCUIT CSEE	
Examples	Item Description 1 HBJ 104.2 LOC 45AT HBJ HJ RR 104.9BT	Item Description 2 TRACK CIRCUIT CSEE TRACK CIRCUIT CSEE
Train Detection Frequency MLTI21 Analog		EGI Code TD0732
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	TRACK CIRCUIT ML TI21 ANALOG	
Examples	Item Description 1 HBJ 104.2 LOC 45AT HBJ HJ RR 104.9BT	Item Description 2 TRACK CIRCUIT ML TI21 ANALOG TRACK CIRCUIT ML TI21 ANALOG
Train Detection Frequency MLTI21 Digital		EGI Code TD0733
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	TRACK CIRCUIT ML TI21 DIGITAL	
Examples	Item Description 1 HBJ 104.2 LOC 45AT	Item Description 2 TRACK CIRCUIT ML TI21 DIGITAL

HBJ HJ RR 104.9BT

TRACK CIRCUIT ML TI21 DIGITAL

Train Detection Frequency PSO 3 EGI Code TD0734

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT PSO 3

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT PSO 3
	HBJ HJ RR 104.9BT	TRACK CIRCUIT PSO 3

Train Detection Frequency PSO 4000 EGI Code TD0735

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT PSO 4000

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT PSO 4000
	HBJ HJ RR 104.9BT	TRACK CIRCUIT PSO 4000

Train Detection Frequency SMTC EGI Code TD0736

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT SMTC

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT SMTC
	HBJ HJ RR 104.9BT	TRACK CIRCUIT SMTC

Train Detection Frequency IPITC EGI Code TD0737

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT IPITC

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT IPITC
	HBJ HJ RR 104.9BT	TRACK CIRCUIT IPITC

Train Detection Frequency AFTAC Model 2 EGI Code TD0738

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT AFTAC MODEL 2

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT AFTAC MODEL 2

HBJ HJ RR 104.9BT

TRACK CIRCUIT AFTAC MODEL 2

Train Detection Frequency FS2500 EGI Code TD0739

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT FS2500

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT FS2500
	HBJ HJ RR 104.9BT	TRACK CIRCUIT FS2500

Train Detection Axle Counter ACS2000 EGI Code TD0741

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      AXLE COUNTER ACS2000

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	AXLE COUNTER ACS2000
	HBJ HJ RR 104.9BT	AXLE COUNTER ACS2000

Train Detection Axle Counter FADC R1 EGI Code TD0742

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      AXLE COUNTER FADC

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	AXLE COUNTER FADC R1
	HBJ HJ RR 104.9BT	AXLE COUNTER FADC R2

Train Detection Treadle Mechanical EGI Code TD0751

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TREADLE MECHANICAL

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TREADLE MECHANICAL
	HBJ HJRR 104.9BT	TREADLE MECHANICAL

Train Detection Coded Microtrax EGI Code TD0761

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT CODED  
MICROTRAX

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT CODED MICROTRAX

HBJ HJ RR 104.9BT

TRACK CIRCUIT CODED MICROTRAX

Train Detection Coded Electrocode 4 EGI Code TD0762

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT CODED ELECTROCODE 4

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT CODED ELECTROCODE 4
	HBJ HJ RR 104.9BT	TRACK CIRCUIT CODED ELECTROCODE 4

Train Detection Coded Electrocode 5 EGI Code TD0763

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT CODED ELECTROCODE 5

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT CODED ELECTROCODE 5
	HBJ HJ RR 104.9BT	TRACK CIRCUIT CODED ELECTROCODE 5

Train Detection Coded Geo EGI Code TD0764

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT CODED GEO

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC 45AT	TRACK CIRCUIT CODED GEO
	HBJ HJ RR 104.9BT	TRACK CIRCUIT CODED GEO

Train Detection Predictor GCP 3000 (Non Mon) EGI Code TD0771

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT PREDICTOR GCP 3000 (NON MON)

Examples	Item Description 1	Item Description 2
	HBJ 104.2 LOC GCP TRK 1	TRACK CIRCUIT PREDICTOR GCP 3000 (NON MON)
	HBJ HJ RR GCP TRK 2	TRACK CIRCUIT PREDICTOR GCP 3000 (NON MON)

Train Detection Predictor GCP 3000 EGI Code TD0772

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      TRACK CIRCUIT PREDICTOR GCP 3000

Item Description 1	Item Description 2
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Examples	HBJ 104.2 LOC GCP TRK 1 HBJ HJ RR GCP TRK 2	TRACK CIRCUIT PREDICTOR GCP 3000 TRACK CIRCUIT PREDICTOR GCP 3000
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Train Detection Predictor GCP 4000 (Non Mon) EGI Code TD0773

Item Description 1 Location + Enclosure + Equipment Name

Item Description 2 TRACK CIRCUIT PREDICTOR GCP 4000 (NON MON)

Examples	Item Description 1 HBJ 104.2 LOC GCP TRK 1 HBJ HJ RR GCP TRK 2	Item Description 2 TRACK CIRCUIT PREDICTOR GCP 4000 (NON MON) TRACK CIRCUIT PREDICTOR GCP 4000 (NON MON)
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Train Detection Predictor GCP 4000 EGI Code TD0774

Item Description 1 Location + Enclosure + Equipment Name

Item Description 2 TRACK CIRCUIT PREDICTOR GCP 4000

Examples	Item Description 1 HBJ 104.2 LOC GCP TRK 1 HBJ HJ RR GCP TRK 2	Item Description 2 TRACK CIRCUIT PREDICTOR GCP 4000 TRACK CIRCUIT PREDICTOR GCP 4000
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Train Detection Predictor HXP-3 EGI Code TD0775

Item Description 1 Location + Enclosure + Equipment Name

Item Description 2 TRACK CIRCUIT PREDICTOR HXP-3

Examples	Item Description 1 HBJ 104.2 LOC XP TRK 1 HBJ HJ RR XP TRK 2	Item Description 2 TRACK CIRCUIT PREDICTOR HXP-3 TRACK CIRCUIT PREDICTOR HXP-3
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Train Detection Predictor XP-4 EGI Code TD0776

Item Description 1 Location + Enclosure + Equipment Name

Item Description 2 TRACK CIRCUIT PREDICTOR XP-4

Examples	Item Description 1 HBJ 104.2 LOC XP TRK 1 HBJ HJRR XP TRK 2	Item Description 2 TRACK CIRCUIT PREDICTOR XP-4 TRACK CIRCUIT PREDICTOR XP-4
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Train Detection Guage Detector TURCK EGI Code TD0776

Item Description 1 Location + Enclosure + Equipment Name

Item Description 2 TRACK CIRCUIT GUAGE DETECTOR TURCK

	Item Description 1	Item Description 2
Examples	HBJ 104.2 LOC 45AT HBJ HJRR 104.9BT	TRACK CIRCUIT GUAGE DETECTOR TURCK TRACK CIRCUIT GUAGE DETECTOR TURCK

### 2.3.8 Train Authority Systems

Train Authority System		EGI Code TA0801
Item Description 1	Location + Enclosure + Equipment Name	
Item Description 2	TOKEN BLOCK TRAIN STAFF	
Examples	Item Description 1 MIT MITTAGONG JCT TO BRAEMER TON THORNTON TO BLOOMFIELD	Item Description 2 TOKEN BLOCK TRAIN STAFF RED TOKEN BLOCK TRAIN STAFF BLUE

### 2.3.9 Power Supply

**Note 1:** The following abbreviations are to be used in Description 1 for consistency.

- Normal – NORM
- Emergency - EMERG

**Note 2:** AC Mains covers the points from the energy authority including the switch board and cable through to the first TX exclusive.

**Note 3:** AC transformed EGI can be used to cover equipment from the transformer inclusive to the DB board or Bus. The following options are available for TYPE in Power Supply AC Transformed if there are multiple TX's supplying DB's or Bus's with different functions.

- SIGNALS
- POINTS
- LXING
- MAINS
- LOCAL

**Note 4:** The following abbreviations are to be used in Description 1 for consistency.

- Internal – INT
- External – EXT
- Microlok – MLK
- Channel 1 – CH1
- Channel 2 - CH2 (etc)

Power Supply AC Mains		EGI Code PO0901
Item Description 1	Location + Enclosure + MAINS + Voltage + Type (NORM or EMERG)	
Item Description 2	POWER SUPPLY AC MAINS	
Examples	Item Description 1 MET MT33 LOC MAINS 240V NORM HXM 168P LOC MAINS 415V NORM	Item Description 2 POWER SUPPLY AC MAINS POWER SUPPLY AC MAINS

Power Supply AC Transformed		EGI Code PO0902
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Item Description 1 Location + Enclosure + Voltage + TX Size + Type

Item Description 2 POWER SUPPLY AC TRANSFORMED

Examples	Item Description 1 MET MT33 LOC 120V 5KVA SIGNALS HXM HJRR 120V 3KVA POINTS	Item Description 2 POWER SUPPLY AC TRANSFORMED POWER SUPPLY AC TRANSFORMED
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Power Supply Motor Generator EGI Code PO0911

Item Description 1 Location + Enclosure + Voltage + Generator Size + Type (NORM or EMERG)

Item Description 2 POWER SUPPLY MOTOR GENERATOR

Examples	Item Description 1 MET MT33 LOC 240V 10KVA EMERG HXM HJRR 415V 22KVA EMERG	Item Description 2 POWER SUPPLY MOTOR GENERATOR POWER SUPPLY MOTOR GENERATOR
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Power Supply UPS EGI Code PO0921

Item Description 1 Location + Enclosure + Voltage + UPS Size + (Name if needed) + UPS

Item Description 2 POWER SUPPLY UPS

Examples	Item Description 1 MET MT33 LOC 120V 3KVA UPS HXM HJRR 120V 6KVA EAST UPS	Item Description 2 POWER SUPPLY UPS POWER SUPPLY UPS
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Power Supply DC Battery Backup LX No Mon EGI Code PO0931

Item Description 1 Location + Enclosure + Equipment Name + CHARGER

Item Description 2 POWER SUPPLY DC BATTERY BACKUP LX NON MON

Examples	Item Description 1 MET MT33 LOC LX CRAGG CHARGER HXM HJ RR LX STORE 74 CHARGER	Item Description 2 POWER SUPPLY DC BATTERY BACKUP LX NON MON POWER SUPPLY DC BATTERY BACKUP LX NON MON
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Power Supply DC Battery Backup EGI Code PO0932

Item Description 1 Location + Enclosure + Voltage + Supply Name + Channel Number

Item Description 2 POWER SUPPLY DC BATTERY BACKUP

Examples	Item Description 1 MET MT33 LOC 12V PS MLK CH2 HXM HJ RR 15V PS LAMP CH1	Item Description 2 POWER SUPPLY DC BATTERY BACKUP POWER SUPPLY DC BATTERY BACKUP
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Power Supply DC Battery Backup LX Mon EGI Code PO0933

Item Description 1      Location + Enclosure + Equipment Name + CHARGER

Item Description 2      POWER SUPPLY DC BATTERY BACKUP LX MON

Examples	Item Description 1 MET MT33 LOC LX CRAGG CHARGER HXM HJ RR LX STORE 74 CHARGER	Item Description 2 POWER SUPPLY DC BATTERY BACKUP LX MON POWER SUPPLY DC BATTERY BACKUP LX MON
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Power Supply DC Rectified EGI Code PO0934

Item Description 1      Location + Enclosure + Voltage + Supply Name + Channel Number

Item Description 2      POWER SUPPLY DC RECTIFIED

Examples	Item Description 1 MET MT33 LOC 15V MLK CH2 HXM HJ RR 50V EXT CH1	Item Description 2 POWER SUPPLY DC RECTIFIED POWER SUPPLY DC RECTIFIED
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Power Supply Solar Battery EGI Code PO0941

Item Description 1      Location + Enclosure + Voltage + Supply Name

Item Description 2      POWER SUPPLY SOLAR BATTERY

Examples	Item Description 1 MET MT33 LOC 12V MLK HXM HJ RR 12V MLK	Item Description 2 POWER SUPPLY SOLAR BATTERY POWER SUPPLY SOLAR BATTERY
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Power Supply Wind Turbine EGI Code PO0951

Item Description 1      Location + Enclosure + Voltage + Supply Name

Item Description 2      POWER SUPPLY WIND TURBINE

Examples	Item Description 1 MET MT33 LOC 12V MLK HXM HJ RR 12V MLK	Item Description 2 POWER SUPPLY WIND TURBINE POWER SUPPLY WIND TURBINE
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## 2.3.10 Communications

Communication Vital Radio EGI Code CM1001

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      COMMS VITAL RADIO

Item Description 1	Item Description 2
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Examples	MET MT33 LOC TRIO HXM HJ RR RUGGED COMM	COMMS VITAL RADIO COMMS VITAL RADIO
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Communication Radio satellite EGI Code CM1002

Item Description 1 Location + Enclosure + Equipment Name

Item Description 2 COMMS RADIO SATELLITE

	Item Description 1	Item Description 2
Examples	MET MT33 LOC ITERRA HXM HJ RR ITERRA	COMMS RADIO SATELLITE COMMS RADIO SATELLITE

Communication Non Vital Radio EGI Code CM1003

Item Description 1 Location + Enclosure + Equipment Name

Item Description 2 COMMS NON VITAL RADIO

	Item Description 1	Item Description 2
Examples	MET MT33 LOC WB RADIO HXM HJ RR WB RADIO	COMMS NON VITAL RADIO COMMS NON VITAL RADIO

Communication Tower Communication Equipment EGI Code CM1011

Item Description 1 Location + Enclosure + Equipment Name

Item Description 2 COMMS TOWER COMMS EQUIPMENT

	Item Description 1	Item Description 2
Examples	GLB MT33 LOC TOWER ID T0043 GLB HJ RR TOWER ID T0043	COMMS TOWER COMMS EQUIPMENT COMMS TOWER COMMS EQUIPMENT

Communication System EGI Code CM1021

Item Description 1 Location + Enclosure + Equipment Name

Item Description 2 COMMS SYSTEM

	Item Description 1	Item Description 2
Examples	CLW CLW RR LOC COMMS EQUIPMENT GLB COMMS RR COMMS EQUIPMENT	COMMS SYSTEM COMMS SYSTEM

### 2.3.11 Cable & Line Route

**Note 1:** *Signalling Cables – This covers all local cables (external) and all main cables that leave the location in the down (away from your capital city) direction up to the point of connection to the next location. One equipment number covers all the cables mentioned above for each enclosure.*

**Note 2:** *Cable Routes - This covers all local cable routes and all main cable routes that leave the location in the down (away from your capital city) direction up to the point of connection to the next location.*

**Note 3:** *All internal location wiring is covered under the interlocking asset for that location. All equipment wiring is covered under the specific equipment class that the equipment belongs to.*

Signalling Cable EGI Code LR1101

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      SIGNALLING CABLES

Examples	Item Description 1 MET MT40 LOC SIG CABLES HBJ HBJ RR SIG CABLES	Item Description 2 SIGNALLING CABLES SIGNALLING CABLES
----------	--	--

Cable Route EGI Code LR1111

Item Description 1      Location + Enclosure + Equipment Name

Item Description 2      CABLE ROUTE

Examples	Item Description 1 MET MT55 LOC CABLE ROUTE TON TN RR CABLE ROUTE	Item Description 2 CABLE ROUTE CABLE ROUTE
----------	---	--

Pole Route EGI Code LR1121

Item Description 1      Parent Location + Equipment Name

Item Description 2      LINE POLE ROUTE

Examples	Item Description 1 MIT MITTAGONG JCT TO BRAEMER TON THORNTON TO BLOOMFIELD	Item Description 2 LINE POLE ROUTE LINE POLE ROUTE
----------	--	--

### 2.3.12 Equipment Enclosures

**Note 1:** The Parent location of this asset only contains the location of the asset (3 letter version i.e. “GLB”) only. This is followed by the equipment name which is the location name.

Equipment Enclosures EGI Code EN1201

Item Description 1      Parent Location + Equipment Name

Item Description 2      EQUIPMENT ENCLOSURE WALK IN LOCATION  
EQUIPMENT ENCLOSURE CUPBOARD/BOX  
EQUIPMENT ENCLOSURE POWER ROOM  
EQUIPMENT ENCLOSURE CABLE TERMINATION  
EQUIPMENT ENCLOSURE COMMS ROOM  
EQUIPMENT ENCLOSURE RELAY ROOM

Examples	Item Description 1 HBJ HJ RR RELAY ROOM HXM HJ168P LOCATION	Item Description 2 EQUIPMENT ENCLOSURE RELAY ROOM EQUIPMENT ENCLOSURE POWER ROOM
----------	---	--

TON TN19 LOCATION

EQUIPMENT ENCLOSURE WALK IN  
LOCATION

### 2.3.13 Communications Based Train Control (CBTC)

TBA

### 2.3.14 Test Equipment

TBA

### 2.3.15 Wayside

TBA

## 2.4 Equipment Status

The Equipment Status is a controlled attribute. It contains a 2 character alpha code. The status is used in conjunction with Equipment Class and EGI to determine the appropriate inspection schedule for an asset. All equipment with status “IS – In Service” must have an active MST associated with them at all times.

The Team Manager will be responsible for ensuring that the correct Equipment Status is assigned to all Signal assets in order to allow accurate compliance reporting.

Status	Status Description	Extended Description	MST Required
BO	Booked Out	Equipment is booked out for replacement or decommissioned for removal and may pose a safety risk to train running. E.g. points requiring checking of integrity of locked switch.  Equipment no longer In Service that has not been removed and poses a risk due to unauthorised third party that needs to be managed.  Refer to TMP for correct EGI	Y
CM	Contractor Maintained	Equipment exists but is maintained by other parties not ARTC. A lease would specifically state this asset is maintained under the contractor’s standards (TMP)	N
DI	Disposed Of	Equipment has been completely removed	N
IS	In Service	Equipment is owned and maintained by ARTC or a contractor on behalf of ARTC	Y
NM	Not Maintained	Equipment exists but is maintained by other parties not ARTC	N <sup>[1]</sup>
PN	Project New	Equipment that is being brought into service. Either as a project or replacement of existing equipment that requires a new Equipment Number, or new equipment being held in this status until commissioned when the Equipment Status should	Y

		be changed to 'IS – In Service'. Refer to TMP for correct EGI	
RI	Redundant Infrastructure	Equipment no longer In Service that has not been removed and poses no risk to unauthorised third party or train running E.g. equipment on a closed line or siding	N
SW	Service Withdrawn	Equipment that has been withdrawn from service and does not require maintenance. This status is for assets identified as owned by ARTC and cannot be moved to Status 'NM – Not Maintained'.	N

**Notes:**

*(1) Not Maintained (NM) shall be used for signal assets that interact with the rail corridor but are not the responsibility of ARTC. ARTC is not responsible for the inspection or maintenance of these assets but they are included in Ellipse for completeness.*

## 2.5 Location Code

The Location field is a full application to help further manage an address or Location that may require a street address, access or contact details. This is not a mandatory field but may have some use for problem locations that need more than a general location description.

The general location is captured under the Equipment Location (see section for detail on this).

## 2.6 District Code & District Code Description

Users should refer to Ellipse for the comprehensive information on the business rules associated with these attributes. An example code is 0001 and description “A

## 2.7 Plant Segment 1 (Corridor)

For most assets Plant Code Level 1 or Segment 1 is a controlled attribute to describe the designated Corridor to which the asset belongs.

This field is the 3 character ANN code representing the corridor, e.g. S00= Main South (Sefton Jct to Albury), N51=North Coast (Telarah to Acacia Ridge), V02=VIC NE (Tottenham to NSW Border and W01 = SA Border to Kalgoorlie.

## 2.8 Plant Segment 2 (Basecode)

For most assets Plant Code Level 2 or Segment 2 is a 5 character controlled attribute utilised to designate the basecode to which the asset belongs. The basecode denotes a continuous length of track, spanning between two physical nodes (e.g. turnouts points). The valid basecodes that appear in Ellipse shall be controlled by those described in the basecode database.

## 2.9 Plant Segment 3 (KMS)

For most assets Plant Code Level 3 or Segment 3 is an 8 character uncontrolled attribute. It contains a track kilometrage reference in the format “NNNN.NNN”. Only the discrete kilometrage of an asset shall be recorded in the SPN.

There are some linear assets in signaling such as Track circuits, Signal cables, Aerial cables, GST etc.

Cables and GST are to use the lowest km of the length as the start km. Track circuits use the location of the relay or receiver of the track circuit.

If the km does not contain 4 digits such as 151km then a 0 is to be included beforehand e.g. 0151. Likewise if the location is only known to the within a hundred metre’s such 151.5km then simply add the required extra zero’s to ensure 8 digits e.g. 0151.500km. Note the dot point between km and metre’s counts as 1 digit. A consistent Km’s format is important for calculation and sorting purposes.

There are certain circumstances where the assets are outside the rail corridor. For example in communications this occurs with radio/telemetry assets housed in a Carrier’s premises, which service ARTC voice or data requirements. The rules to apply for these assets is as follows: Draw a line 90 degrees from the nearest rail, and then determine the rail KM at that point. This will be the location data for that asset. (e.g. 0151.485Km).

## 2.10 Plant Segment 4 (Function)

For most assets Plant Code Level 4 or Segment 4 is a controlled 2 character attribute utilised to further describe groups of assets within an Equipment Class which have distinct differences in function.

For instance Equipment Code TD.

Refer to the section on Equipment Class for a complete list of Class's to be used as the function code.

Any changes or additions to the valid Function codes shall ensure that the last 2 characters are unique across all structures asset types.

## 2.11 Plant Segment 5 (Equipment Name)

The Equipment Name code is a controlled value attribute. It contains a maximum of 10 digits. The equipment Name is derived from the actual equipment name as labelled in the field or listed within signalling controlled documents such as track plans.

## 2.12 (Plant Segment 6)

*Note: Signals assets do not contain any information in the SPN past Plant Code Level 5/Segment 5. This is left blank.*

## 2.13 Associated Equipment Item

Users should refer to ARTC Fixed Asset Register FCA-GL-045 for more comprehensive information on the business rules associated with the Account Code attribute.

## 2.14 Productive Unit Item

The Productive Unit is used to create a parent equipment for multiple pieces of equipment. The Productive Unit is the next level of hierarchy above the normal Equipment. The Class SL is used for productive unit and the EGI SC9900.

## 2.15 Equipment Location

The Equipment Location is a controlled value attribute. It contains a 3 character code. The code refers to the general geographic location of the asset on the Network (i.e. Goulburn = GLB).

The values in the Equipment Location attribute are not directly controlled by another hierarchy attribute (e.g. Productive Unit, Basecode or Account Code); therefore the responsible manager must ensure that the values in these various attributes are consistent.

A Location has no dimensions of area. Locations are not split into sub-locations for the purpose of, for example, defining a yard or depot within a Location. A Location can belong to more than one Route (e.g. Junee S00 and S80, Muswellbrook N00 and N40). A Location may belong to several Basecodes and Account Code segments.

The significance of the Equipment Location is that it is used (in conjunction with the AAA table, refer to cl 6.1.1) to determine the Work Group that any defect generated Work Order is assigned to by default.

## 2.16 Account Code

Users should refer to ARTC Fixed Asset Register FCA-GL-045 for more comprehensive information on the business rules associated with the Account Code attribute.

## 2.17 Active (Y/N)

Users should refer to the relevant Asset Management documentation for more comprehensive information on the business rules associated with the Active attribute.

## 2.18 Productive Unit SPN (Parent)

The Productive Unit is a controlled attribute. It contains a 6 character code. The PU specifies the parent-child relationship of the asset within the organisations hierarchy. Utilising the Productive Unit functionality allows the construction of a hierarchy of equipment into reportable groups which then allows reporting processes based on these structures.

### ARTC

- **Business Unit** (e.g. Interstate Network)
  - **Corridor** (e.g. Main South)
    - **Delivery Unit** (e.g. Sydney Ivanhoe & Albury)
      - **Provisioning Centre** (e.g. Mittagong PC)
        - **Operational Equipment Item** (e.g. S00TR10044DNM1)

The responsible manager shall ensure that the assigned PU matches the Work Group (as determined by the Location, refer to cl 2.8 below) that any defect repair Work Orders are assigned to Users should refer to the relevant Asset Management documentation for more comprehensive information on the Productive Unit hierarchy and business rules.



## 2.19 Equipment Class (EC)

The Equipment Class (EC) is a controlled attribute. It contains a 2 character alpha code. The EC is the highest level of the hierarchy used to organise Signal assets in Ellipse.

The Equipment Class is directly related to the SPN (refer to section on SPN). A user cannot alter the Equipment Class without providing a new SPN number. Similarly, the SPN Function plant segment cannot be altered without providing a new Equipment Class (or confirming the existing Equipment Class value).

The Equipment Group Identifier (refer to EGI section) is not directly related to the Equipment Class or SPN Function.

The EC is the highest level of the hierarchy used to organise Signal assets in Ellipse

The hierarchy is as follows:

- Equipment Class (EC) (e.g. Train Detection)
  - Equipment Group Identifier (EGI) (e.g. DC)

EQUIPMENT CLASS	EQUIPMENT DESCRIPTION
CS	CONTROL SYSTEM
TM	TELEMETRY
LX	LEVEL CROSSING (SIGNAL)
SG	SIGNALS
IN	INTERLOCKING
PT	POINTS
TD	TRAIN DETECTION
TA	TRAIN AUTHORITY SYSTEMS
PO	POWER SUPPLY
CM	COMMUNICATIONS
LR	CABLE & LINE ROUTES
EN	ENCLOSURE
TC	COMMUNICATION BASED TRAIN CONTROL
EC	EQUIPMENT CALIBRATION
WS	WAYSIDE
RW	RIGHT OF WAY

**Table 2: Equipment Class**

**Note 1: Obsolete Equipment (XX)** exists as an Equipment Class in Ellipse for Signal equipment that has been replaced, removed etc. and shall retain their signals Equipment Class and should be marked with the Status 'Disposed Of' (DI) when Equipment is made.

## 2.20 Equipment Group Identifier (EGI)

The EGI is a controlled attribute. It contains a 6 character alpha or numeric code. The first 2 letters are alpha and use the Class. The next characters use numerals. The EGI is the primary mechanism used by Ellipse to identify what type of asset is being described by an equipment record. The EGI provides a method to further group items of similar characteristics within an equipment class without creating distinct classes of their own e.g. Equipment Class “Train detection” contains EGIs for train Detection such as “DC”, “HVI”, “Frequency” etc.

It is essential for the correct assignment of nameplate attributes, defect entry, mobility work order generation and MST’s that the EGI associated with an asset is accurate.

EC	EGI	Description
CS	CS0101	Control System Operator Local Panel
CS	CS0111	Control System Territory Phoenix
CS	CS0112	Control System Territory PTOS
CS	CS0113	Control System Territory TMACS
CS	CS0121	Control Sys Equipment Mon 4Site
CS	CS0122	Control Sys Equipment Mon Points
CS	CS0123	Control Sys Equipment Mon WAM
CS	CS0124	Control Sys Equip Mon Maint. Terminal
TM	TM0201	Telemetry FDM
TM	TM0202	Telemetry iMAC
TM	TM0203	Telemetry Kingfisher
TM	TM0204	Telemetry Moscad
TM	TM0205	Telemetry ICAPs
LX	LX0301	Level Xing Mon RX5 Lights
LX	LX0302	Level Xing Mon RX5 Lights & Booms
LX	LX0303	Level Xing Mon RX12 Ped Lights
LX	LX0304	Level Xing Mon RX12 Ped Lights & Booms
LX	LX0305	Level Xing Mon Supplementary Lights
LX	LX0311	Level Xing Not Mon RX5 Lights
LX	LX0312	Level Xing Not Mon RX5 Lights & Booms
LX	LX0313	Level Xing Not Mon RX12 Ped Lights
LX	LX0314	Level Xing Not Mon RX12 Ped Lights & Booms
LX	LX0315	Level Xing Not Monitored Supplementary Lights
SG	SG0401	Signal Incandescent
SG	SG0402	Signal LED

SG	SG0411	Signals Mechanical Semaphore
SG	SG0421	Signals Noticeboard Signs
IN	IN0501	Int. Relay AC Shelf
IN	IN0502	Int. Relay DC Shelf
IN	IN0503	Int. Relay Miniature Plug in
IN	IN0504	Int. Relay Large Plug in (line)
IN	IN0511	Int. CBI Microlok 2
IN	IN0512	Int. CBI HIMA
IN	IN0513	Int. CBI Westrace 1
IN	IN0514	Int. CBI Westrace 2
IN	IN0515	Int. CBI ElectrologIXS
IN	IN0516	CBI Westlock
IN	IN0517	Int. CBI VHLC
IN	IN0518	Int. CBI EC4
IN	IN0519	Int. CBI EC5
IN	IN0521	Int. CBI VPI
IN	IN0522	Int. CBI HD Link
IN	IN0523	Int. SSI
IN	IN0531	Int. Mech. Cam And Tappet Main Frame
IN	IN0532	Int. Mech. Ground Frame
IN	IN0533	Int. Mech. Rel.
PT	PT0601	Points Combined M Series
PT	PT0602	Points Combined HW Series
PT	PT0603	Points Combined KA Series
PT	PT0604	Points Combined Solar Hydra
PT	PT0611	Points Derailer M Series
PT	PT0612	Points Derailer KA Series
PT	PT0613	Points Derailer 84M Series
PT	PT0621	Points Clamplock Hydraulic
PT	PT0622	Points Clamplock Vossloh Series
PT	PT0631	Points Clawlock 84M Series
PT	PT0632	Points Clawlock S700 Series
PT	PT0641	Points Spherolok 84M Series
PT	PT0642	Points Spherolok S700 Series
PT	PT0651	Points Mechanical

PT	PT0652	
PT	PT0653	Points Mechanical Derailer
PT	PT0654	Points Mechanical GRS
PT	PT0661	Points Releasing Switch
PT	PT0662	Points Releasing Switch Fortress
PT	PT0663	Points Switchlock Westinghouse
PT	PT0664	Points Switchlock Westinghouse HLM
PT	PT0665	Points Releasing PTOS Master Key Safe
PT	PT0671	Points Not commissioned/Seldom used/Booked Out
TD	TD0701	Train Detection DC Standard
TD	TD0702	Train Detection DC Shelf Type
TD	TD0703	Train Detection Westrack/TD4
TD	TD0711	Train Detection HVI
TD	TD0721	Train Detection AC
TD	TD0731	Train Detection Frequency CSEE
TD	TD0732	Train Detection Frequency ML TI21 Analog
TD	TD0733	Train Detection Frequency ML TI21 Digital
TD	TD0734	Train Detection Frequency PSO III
TD	TD0735	Train Detection Frequency PSO 4000
TD	TD0736	Train Detection Frequency SMTC
TD	TD0737	Train Detection Frequency IPITC
TD	TD0738	Train Detection Frequency AFTAC Model 2
TD	TD0739	Train Detection Frequency FS2500
TD	TD0741	Train Detection Axle Counter ACS2000
TD	TD0742	Train Detection Axle Counter FADC
TD	TD0751	Train Detection Treadles Mechanical
TD	TD0761	Train Detection Coded Microtrax
TD	TD0762	Train Detection Coded Electrode 4
TD	TD0763	Train Detection Coded Electrode 5
TD	TD0764	Train Detection Coded GEO
TD	TD0771	Train Det Predictor (Non Mon) GCP 3000
TD	TD0772	Train Detection Predictor GCP 3000
TD	TD0773	Train Det Predictor (Non Mon) GCP 4000
TD	TD0774	Train Detection Predictor GCP 4000
TD	TD0775	Train Detection Predictor HXP-3

TD	TD0776	Train Detection Predictor XP-4
TD	TD0781	Train Detection Guage Detector TURCK
TA	TA0801	TA Sys. Token Block Train Staff
PO	PO0901	Power Supply AC
PO	PO0902	Power Supply AC Transformed
PO	PO0911	Power Supply Motor Generator
PO	PO0921	Power Supply UPS
PO	PO0931	Power Supply DC Batt Backup LX no Mon
PO	PO0932	Power Supply DC Battery Backup
PO	PO0933	Power Supply DC Batt Backup LX Mon
PO	PO0934	Power Supply DC Rectified
PO	PO0941	Power Supply Solar Battery
PO	PO0951	Power Supply Wind Turbine
CM	CM1001	Comms Vital Radio
CM	CM1002	Comms Radio Satellite
CM	CM1003	Comms Non Vital Radio
CM	CM1011	Comms Tower Comms Equipment
CM	CM1021	Comms System
LR	LR1101	Signalling Cable
LR	LR1111	Cable Route
LR	LR1121	Aerial & Pole Route
LR	LR1122	Pole Inspection
EN	EN1201	Equipment Enclosures
TC	TC1301	CBTC Office ATMS
TC	AT1311	CBTC Trainborne ATMS Loco
TC	AT1312	CBTC Trainborne ATMS EOTD
TC	TC1321	Field TPWS
TC	TC1331	Trainborne TPWS
TE	TE1501	Test Instruments
TE	TE1502	Maintenance Gauges
WS	WS1601	WSI Slip Detector
WS	WS1602	WSI Rockfall Detector
WS	WS1603	WSI <del>Rainfall Detector</del> Weather Station
WS	WS1604	<del>WSI Weather Station</del>
WS	WS1605	WSI Pump Station

WS	WS1606	WSI Camera
WS	WS1611	WSR Hot Box Detector (HBD) with DED
WS	WS1612	WSR Bearing Acoustic Monitor - (RailBAM)
WS	WS1613	WSR Dragging Equipment Detector (DED)
WS	WS1614	WSR Wheel Condition Monitor (WCM)
WS	WS1615	WSR Wheel Profile Monitor
WS	WS1616	WSR Wheel Noise Detector (Rail SQAD)
WS	WS1617	WSR Bogi Monitor (TBOGI)
WS	WS1618	WSR Weigh Bridge
WS	WS1619	WSR Height Detector
RW	RW0001	Engineer Inspection Signal Sighting Front of Rail Vehicle

**Table 3: Equipment Group Identifier (EGI)**

All current signals EGI’s shall begin with the alpha prefix such as “TD” followed by a 4-digit numerical suffix. The correct format EGI must be associated with the equipment record for certain Ellipse functionality to operate i.e. to allow nameplate data to be recorded against the asset, defects to be recorded against the asset, mobility enabled inspections to be recorded against the assets and actioned.

### 3 Classifications

The classifications sub-frame is located within the equipment register [MSE600], as shown in Figure 1.

The screenshot shows a web interface with a 'Classifications' tab selected. It contains several dropdown menus for filtering: Management Business Unit, Network, Corridor, Line Segment, Management Delivery Unit, Provisioning Centre, State, ARTC Owned Y/N, ARTC Maintained Y/N, Shared Asset Y/N, and Cost Recovery Y/N.

**Figure 1 - Equipment Classification Sub-frame**

The classification sub-frame contains 11 ARTC defined attributes. The ARTC classification attributes are designed to perform one of two functions;

- Improve equipment searching functionality (by providing common ARTC groupings that are not provided for by the standard equipment register configuration or business hierarchy)
- Facilitate cost recovery (for shared infrastructure assets)

The “search functionality” attributes are controlled value attributes. They contain a 2 character alphanumeric code.

The attribute for each can be accessed at MSE010/E2 to MSE010/E12 within Ellipse

The “cost recovery” attributes are controlled value attributes. They contain a 1 character alpha cod that has the YN data type.

The purpose of each classification attribute is specified in Table 4 below.

Classification	Control	Example Code	Purpose	Example Description
Management Business Unit	2N	03	Search	Interstate
Network	2N	3C	Search	Tottenham (VIC) – Crystal Brook (SA)
Corridor	2N	AA	Search	A00 – Keswick to VIC Border
Line Segment	2N	AB	Search	0112 - Crystal Brook – Spencer Junction
Management Delivery Unit	2N	3E	Search	Telarah to Acacia Ridge
Provisioning Centre	2N	AO	Search	Geelong
State	2N	VC	Search	Victoria
ARTC Owned	YNS	Y	Cost Recovery	Yes
ARTC Maintained	YNS	N	Cost Recovery	No
Shared Asset	YNS	Y	Cost Recovery	Yes
Cost Recovery	YNS	N	Cost Recovery	No

**Table 4 - Equipment Classification Attributes**

Classification attributes can be used in combination with attributes in the Primary Search and Advanced Search sub-frames to search the equipment register.

**Note:** A limitation of the classification attributes is that they may only be used to search or filter within the equipment register. They may not be used to filter or search for MST's, work orders, work requests etc. in their respective modules.

## 4 Alternate References

A signals equipment record in Ellipse may be a composite of multiple data sources. Where a data source has been used to composite the equipment record identifying data shall be stored in the Alternate References tab to provide backwards compatibility with historic data and documents. Examples of this identifying data include:

- BMS Asset Number (BMSID)
- BMS Structure Name (BMSNAME)
- Downer EDI Asset Number (EDINUM)
- Temporary AMP Database 'Temporary Asset Number'

## 5 Extended Description

The Extended Description is a free text sub-frame. It may be used by the responsible manager to store data specific to the asset that is not stored in a defined attribute within the nameplate record.

The Extended Description frame will be used to store any data migrated from historic databases that either do not warrant a nameplate record or were rarely populated (e.g. access phone number in BMS).

Entry of any other data in this frame will be at the responsible manager's discretion.

## 6 Nameplate

### 6.1 Purpose

The Nameplate sub-frame in Ellipse contains data specific to the asset. The Nameplate allows ARTC to build a more comprehensive dataset for each asset. Nameplate attributes are defined for each EGI and as such the EGI assigned to the asset determines what information can be recorded against that asset.

The data contained in the Nameplate attributes is editable by the Responsible Manager. The Responsible Manager shall ensure that the records maintained for each asset in the Nameplate sub-frame are as complete and accurate as possible.

Equipment Number: 00000537024  
 Description: HSM ENHSMRRCRBX SITE HSMALT  
 EQUIPMENT ENCLOSURE  
 Associated Equipment Item:

General	Costing	Tracing	Condition	Classifications	Map Location	Location	Extended Desc	Nameplate	Alternate References	Continuous Asset Segments	Associated Equipment	Name Code Colloquial
Seq No	Mandato	Attribute Name	Attribute Description	Attribute Value	Description	Automatic Attr						
0010		PLANTSEG1	Plant Segment 1	V01		<input checked="" type="checkbox"/>						
0020		PLANTSEG2	Plant Segment 2	36000		<input checked="" type="checkbox"/>						
0030		PLANTSEG3	Plant Segment 3	0327.300		<input checked="" type="checkbox"/>						
0040		PLANTSEG4	Plant Segment 4	EN		<input checked="" type="checkbox"/>						
0050		PLANTSEG5	Plant Segment 5	HSMALT		<input checked="" type="checkbox"/>						
0060		PLANTSEG6	Plant Segment 6			<input checked="" type="checkbox"/>						
0100		ROUTE	Route	V01	Tottenham to SA Border							
0200		BASECODE	Track BaseCode	36000	PYRENEES TO SERVICETON (SA BORDER)							
0300		NKMFROM	Kilometre From	327.376								
0400		NKMT0	Kilometre To	327.376								
0500		TYPESC1221	Type	0100	Cupboards							
0700		MATSIG	Material									
0900		MANSIG	Manufacturer	MH	Mackenzie / Holland							
1000		CLSIF18	Classification	AS	Double/Single Stainless Steel Cupboard							
1100		VERSC1221	Version Model	BO	Sig Equip							
9999		EGIORIGINAL	Original EGI for TMP	SC12210100	Cupboards							

### 6.2 Attribute Name (Nameplate)

Nameplate attributes can be assigned at various levels:

- Universal Nameplates (i.e. Plant Segment 1 to 5). These are common across all assets. They are populated from the SPN and are not editable in the Nameplate sub-frame.
- Common Nameplates (i.e. Discrete Kilometrage). These are common to all signal assets. They share a common control across all EGI's and are editable in the Nameplate sub-frame.
- Unique Nameplates. These are common to either a single or a range of EGI's. They share a common control and are editable in the Nameplate sub-frame.

Each Attribute or Nameplate has an Attribute Name stored in a control table. Each Attribute or Nameplate also has an Attribute Description which is referenced against the control table to provide the 'plain English' description. The nameplate is essentially the header used to describe the drop down options within it.

### 6.3 Attribute Value (drop down)

Each Nameplate has several Attribute Values better known as drop downs. A drop down gives the specific detail for that asset. Nameplate drop downs are stored in Control Tables to enforce data quality controls in the Nameplate attributes. The control is specified using the



table name. The Control Tables can be searched and viewed in the Search Table module [MSE010].

A Nameplate value within a defined Control Table shall store data as a 2-digit code. These codes can be found under the 'Table Type' header.

The Nameplate sub-frame and any data exports shall display the 'Description' for the corresponding Table Value.