ASSET DATA DICTIONARY DEFINITION DOCUMENT (AD4)
L76635 – REPEATER UNIT

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1 Introduction

1.1 Asset Details

Class Code:	L76635
Class Name:	Repeater Unit
Class Lineage:	Construction Products> Services > Information-communication services products > Communication cables > Other > Repeater Unit

1.2 Description

A repeater unit extends the range of a transmitted radio signal by receiving the original signal then boosting and re-broadcasting it. It may also be capable of rebroadcasting at a different frequency.

The repeater receives a weak or low-level radio signal and transmits it again at a higher level of power. This enables the signal to be sent over a further distance without a reduction in the quality of the signal.

“Off air” repeater units take their input from RF signals on the airwaves. Fibre-optic repeater units take inputs from fibre-optic cables. Both types rebroadcast RF signals.

1.3 Related Functions

All information on the configuration of asset classes (L-Class) to functions is contained within the latest revision of the Asset Data Dictionary Master Configuration document (eB ref: CRL1-XRL-Z3-ADDSD-CR001-50186)

2 Asset Tag Identification Rules

Assets will be identified as required by the Asset Identification Standard (CRL1-XRL-O6-STD-CR001-00031), in the following format:

<LCS Code>-<Function Code>-<Incremental number to ensure uniqueness>

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2.1 Example Images

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3 Attributes

3.1 Generic Attributes

All Classes of assets will have a set of Generic Attributes for which data is collected without exception. Full details relating to these assets can be found at:

AD4 – Generic Attributes CRL1-XRL-Z3-ADDSD-CR001-50069

3.2 Class Specific Attributes

Below is a table of the further specific attributes which are associated with this asset class.

Attribute Name	Base Unit or Formula	Value Type (See Below)	Decimal Places (nu Only)	Defined Values List (pd only)	Description
Maximum Frequency (Hertz)	Hertz	NU	0		Maximum Frequency of the repeater unit
Minimum Frequency (Hertz)	Hertz	NU	0		Minimum Frequency of the repeater unit
Duplex Distance (MHz)	MHz	NU	0		Distance between the uplink and downlink frequencies
Impedance (Ohms)	Ohms	NU	0		Impedance of the Repeater Unit
Input Signal		PD		RF Signal Fibre Optic Signal	Input signal of the repeater unit

pd = Predefined List (Listed Values Only)
nu = Numeric (dp and number format can be stipulated)
ch = Free text (Max 255 Characters)
da = Date (dd-mm-yyyy)
me = Memo (Free text 1GB Limit)

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4 Performance Data

This section is to be used to specify the performance data to be gathered from this Class of asset when in operation. To be populated once the performance measures have been agreed with the Infrastructure Managers.

5 Labelling

Information and guidance on the standard labelling convention for all asset classes is contained within the latest revision of the Asset Naming and Labelling Convention Document (eB ref: CRL1-XR1-Z3-ADDSD-CR001-50413).

6 Other Information

Not Applicable

7 Reference Material

- Asset Data Dictionary Master Configuration document - CRL1-XRL-Z3-ADDSD-CR001-50186
- Asset Identification Standard - CRL1-XRL-O6-STD-CR001-00031
- AD4 – Generic Attributes - CRL1-XRL-Z3-ADDSD-CR001-50069
- <ADD OTHER REFERENCE DOCUMENTS HERE>

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8 Crossrail Technical Approvals

Name	Role	Date
[redacted]	Project Manager - C660 Communications and Control Systems	19-Sep-2014

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