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[NR/L2/SIG/11400](#) Issue 6

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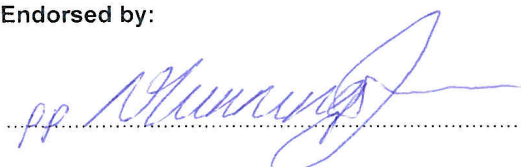
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Date:	2 nd June 2012
Compliance date:	1 st December 2012

Level 2

HPSS Handbook

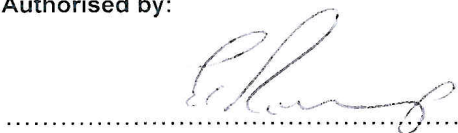
Endorsement and Authorisation

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Published and Issued by Network Rail, Kings Place, 90 York Way, London. N1 9AG.

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User information

This Network Rail standard may contain requirements that are colour-coded according to the following Red–Amber–Green classification.

Red – Mandatory requirements

- **Requirements** that **will** be complied with, and achieved under all circumstances.
- Accountability for the efficacy of these requirements lies with the Professional Head/Standard Owner.
- These requirements are monitored for compliance.
- Local non-compliances, discovered through engineering verification visits, will be reported and monitored through the quarterly Engineering Verification Report.
- Corrective actions will be enforced where local non-compliances remain open beyond the agreed mitigation plan dates.
- These are presented in a red box **and with the word “shall” or a direct instruction.**

Amber – Conditional requirements

- **Requirements** that **will** be complied with unless deviation has been approved.
- Accountability for the efficacy of these requirements lies with the Professional Head/ Standard Owner, or their nominated Delegated Authority.
- These requirements are monitored for compliance.
- Derogations **may** be permitted; which are to be approved by Standard Owner in advance.
- Derogations and Temporary Non-Compliances **may** be granted through the existing Delegated Authority arrangements.
- These are presented with an amber sidebar **and with the word “shall” or a direct instruction.**

Green – Guidance

- Guidance based on good practice; representing supporting information, based on good practice, to help achieve **RED** and **AMBER** requirements.
- This guidance is **not mandatory** and is not monitored for compliance.
- Alternative solutions may be used, which do not need to be formally approved.
- Decisions made by a competent person to use alternative solutions should be backed up by appropriate evidence/documentation.
- This is presented with a dotted green sidebar **and with the word “should” (usually in notes).**

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Issue Record

Issue	Date	Comments
1	Dec 2002	1st issue
2	April 2003	Minor amendments
3	June 2003	Includes F & SG switches
4	Sept 2009	Total rewrite and introduces 3 new IAD documents
5	Dec 2010	Minor change to update cross references
6	June 2012	Added: A119, E311, G130, and G140

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 01/12/2012.

This standard should be applied to all recovery and abandonment proposals presently at GRIP stages 1 to 3. Additionally, it should be applied, wherever practical and where cost savings would result, to projects presently at GRIP stages 4 or 5.

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1 Purpose

This Level 2 standard mandates the application of the High Performance Switch System (HPSS) Handbook. It is intended to provide instruction and guidance on the application of HPSS on Network Rail Infrastructure.

Inclusion of documentation (including those issued by IAD Rail Systems) within this Handbook authorises it for use on Network Rail's infrastructure.

2 Scope

This Level 2 standard applies to all applications of HPSS on Network Rail's infrastructure.

The HPSS Handbook consists of this specification and a number of individually published sections that provide information to signalling designers, installers, maintainers and trainers

Each section contains details of its scope and the requirements for compliance.

3 Abbreviations & Definitions

Abbreviations

Term	Definition
ECU	Electronic Control Unit
HPSA	High Performance Switch Actuator
HPSS	High Performance Switch System
LVDT	Linear Variable Differential Transformer
S&C	Switch and Crossing