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Issue:	I
Date:	August 2007

Level 3

Design Specification:

S&C System:- NR60 / HPSS and NR60 / Hydrive configurations

Endorsement & Authorisation

Endorsed by:



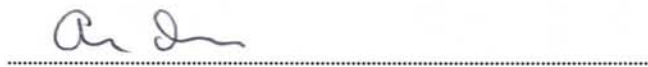
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Issue record

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1	August 2007	1 st issue

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 31 August 2007.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 4 to continue to comply with the Issue of any relevant Network Rail Standards current when GRIP Stage 4 was reached and not to comply with requirements contained herein, unless the designated Standard Owner has stipulated otherwise in the accompanying Briefing Note.

Reference documentation

See page 19

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1 Introduction

Reference 1 is the System Specification for the Design of Switch and Crossing Systems, which contains the high level requirements on the system.

This document is the design specification for NR60 Switch and Crossing systems that follows from reference 1 and contains more detailed and specific requirements.

NR60 S&C systems are intended to be used on high usage routes with line speeds of up to 125mph.

Many of the design specification requirements are already contained in Network Rail and Group Standards; reference 2 validates these requirements against Reference 1.

If this document conflicts with existing standards, this document takes precedent when supported by a formal derogation until the existing standards are amended.

2 Scope

The design specification is applicable to:

- NR60 S&C designs operated by HPSA point operating equipment with PowerLink torsional backdrives
- NR60 S&C designs operated by Hy-drive point operating equipment

3 Structure of Specification

Reference 1 contains three main types of requirement. The design specification requirements corresponding to these are contained in the sections in this document shown below:

Type of requirement	Section containing derivation of design specification requirements
Primary	Section 4
Interface	Section 5
Supplementary	Section 6

Reference 1 expresses the requirements at a high level, with the detail being given in the separate sections of this document. Design specification requirements are given for each high level requirement in turn, taking into account the additional detail.

Table 1 in reference 1 shows a mapping from the high level system requirements to requirements for the main sub-systems. The design specification requirements are given against each row of this table in turn.

This is to ensure that the design specification requirements are given in the context of the system requirements whilst taking cognisance of the sub-system requirements.

In some cases a sub-system requirement maps onto more than one system requirement: in these cases cross-referencing is given with any additional explanation required.