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Level 3

Specification for Point Interface Location

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Issue record

Issue	Date	Comments
1	June 2009	First issue for trial purposes only

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 6th June 2009.

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

GC/RT5021	Track System Requirements
NR/GN/SIG/11600	Signal and Operational Telecommunications Design: Technical Guidance
NR/L2/SIG/30014	Signalling Works Testing Handbook
NR/L2/SIG/30070	Signalling of Modular Switch and Crossing Renewals

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1 Purpose

The Point Interface Location is a concept to enable a new point operating equipment to be connected to the existing control location with minimal alteration to the existing circuitry and power supplies.

This specification describes:-

- the interfaces required for the new point operating equipment,
- the interfaces required for connection to the existing control circuitry (and how those interfaces may be configured) and
- the facilities to be provided for maintenance.

2 Scope

This specification applies to the first generation of a Point Interface Location for use with Hy-drive point operating equipment utilising previously approved components arranged in accordance with current circuit principles.

This specification is only applicable to specially authorised trials of the Modular S&C Process.

This specification includes two variants of the Point Interface Location, one for a turnout with Left Hand Switch Normally Closed (LHSNC) and the other for Right Hand Switch Normally Closed (RHSNC) suitable for layouts with up to 6 SO actuators.

3 Definitions

3.1 Modular S&C

A generic term for the 'end to end' process of renewal of crossovers and turnouts using a series of short (typically 8 hour) possessions utilising techniques to transport and install the point equipment in panels.

3.2 Point Interface Location (PIL)

A standard apparatus case housing circuitry (in accordance with the approved drawings which can be obtained from the Head of Signal Engineering) to enable a layout equipped with Hydrive point operating equipment to be controlled from existing signalling circuits.

3.3 Point Operating Equipment (POE)

The mechanism to move, lock and detect a set of points. For a Hy-drive installation, this includes the Hi-Flow power pack, in-bearer clamp lock and up to 6 SO secondary actuators and detectors.

3.4 Remote Condition Monitoring (RCM)

A system to allow the operation of the POE to be remotely monitored allowing early intervention prior to failures and remote diagnostics.