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Guidance Note

SSI Configuration Guide

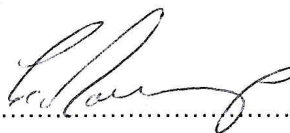
Endorsement and Authorisation

Endorsed by:



Pardip Basran, Working Group chair

Authorised by:



Ed Rollings, Steering Group chair

Accepted for issue by:



Mick McManus, National Standards Manager

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Issue record

Issue	Date	Comments
1	February 1998	New document
2	October 1998	Updated for introduction of SSI4306-E2 and GASL MkALIII MPM/MM and associated program AL4303-G2
3	June 1999	Updated for introduction of WSL MkWSIII MPM/MM, WSL Mk3A TFM and D5 Technician's Terminal Software
4	June 2012	Appendix moved to 17901/A, duplication removed and SSI emulators added.

Reference documentation

NR/L2/SIG/17002	SSI Applications Manual Contents This document lists all SSI documents forming the SSI Applications Manual and authorises the use of SSI8003 , SSI8150 , SSI8500 and SSI8505 .
SSI8150	SSI Software Record This document formally records all versions of SSI software and compatible versions of hardware. It forms the primary source document for this specification.
SSI8003-54	Data/Compiler/Program Compatibility This document defines the checks to be performed by the data supplier when undertaking a system upgrade.
NR/GN/SIG/17902	SSI Program and Data Problems This document summarises significant problems with SSI programs and data that have been found in service.
NR/GN/SIG/17903	SSI Hardware Problems This document summarises significant SSI hardware problems that have been previously identified within Technical Investigation Reports.

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1 Purpose

This document is a guide to the configuration of SSI Hardware and Software, based mostly upon information contained in the SSI Applications Manual, the contents of which are stated in [NR/L2/SIG/17002](#) , and in particular upon the SSI Software Record [SSI8150](#) . It describes through reference the various Categories of SSI system, and the permitted combinations of hardware and software in each Category. Means of identifying each Category and their defining features are described, together with upgrade paths and their advantages. It also describes SSI emulators that are used to replace SSI central interlockings.

The separate Appendix [NR/GN/SIG/17901/A](#) lists the Category of each Central Interlocking currently installed on Network Rail infrastructure.

2 Scope

This document is Issue Four. Section 9 contains advance information on some current development activities and their impact, which are not yet included in [SSI8150](#). Separate Appendix [NR/GN/SIG/17901/A](#) is drawn from other sources.

It is intended for the information of users of installed SSI systems, and does not cover those elements of SSI used with the Design Workstation and On-Site Simulation systems, nor those activities relating to data preparers and scheme designers.

This document provides guidance on the use of the following equipment:

- Panel Processor Modules
- Interlocking and Diagnostic Multiprocessor Modules
- Memory Modules
- Data Link Modules
- Long Distance Terminals
- Signal Modules
- Points Modules

Should there be any disagreement between this document and the SSI Applications Manual, the information in the SSI Applications Manual is to be taken as definitive.

3 Definitions

SSI Document and Software Identification

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BR	Network Rail PLC (applies to existing documents only, which will not be updated)
SSI	Network Rail PLC (unless the document is a Line Standard, in which case the numbering convention for Line Standards applies)
AL	ALSTOM Transport Information Solutions
WS	Invensys Rail Ltd (formerly Westinghouse Signals Ltd)
AE	DeltaRail (formerly AEA Technology plc)

The numeric part of the identifier will generally reflect the number of the BR document from which it was originally derived. The issue of a new document identifier does not necessarily imply the withdrawal of the equivalent BR document, which may still apply to existing equipment designs.

SSI	Solid State Interlocking
MPM	Multiprocessor Module
MM	Memory Module
PPM	Panel Processor Module
DLM	Data Link Module
LDT	Long Distance Terminal
IECC	Integrated Electronic Control Centre
PMUX	Panel Multiplexer
PM	Points Module
SM	Signal Module
TT	Technician's Terminal
GASL	GEC ALSTHOM Signalling Ltd, now ALSTOM Signalling Ltd
WSL	Westinghouse Signals Ltd, now Invensys Rail Ltd

4 System Configuration - Central Interlockings

4.1 Current Production

The current production versions of conventional SSI are the Category 2B (Extended Memory), AL3A and WS3A. However large new signalling schemes are likely to utilise Smartlock or WESTLOCK CBIs emulating one or more SSI interlockings, and connecting to conventional SSI data links via trackside interfaces.