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[SSI 8505D ISSUE 6](#)

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Module

Chapter D: Installation, Testing, And Commissioning

Endorsement and Authorisation

For endorsement, authorisation and issue record of this document, please refer to the SSI Applications Manual Contents, NR/L2/SIG/17002

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Ref:	SSI 8505D
Issue:	6
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User information

This Network Rail standard contains colour-coding according to the following Red–Amber–Green classification.

Red requirements – No variations, could stop the railway

- **Red requirements shall** always be complied with and achieved.
- Red requirements shall be presented in a red box **with the word “shall” or expressed as a direct instruction**.
- Accountability for the efficacy of red requirements lies with the Professional Head/Standard Owner.
- Red requirements are monitored for compliance.
- Corrective actions shall be enforced if deviations are discovered through functional checks (e.g. engineering verification visits, audit or Operations Self-Assurance).

Amber requirements – Controlled variations, approved risk analysis and mitigation

- **Amber requirements shall** be complied with unless variation has been approved in advance.
- Amber requirements shall be presented with an amber sidebar **and with the word “shall” or expressed as a direct instruction**.
- Accountability for the efficacy of these requirements lies with the Professional Head/Standard Owner, or their nominated Delegated Authority.
- Amber requirements are monitored for compliance.
- Variations **may** be permitted. Variations are approved by the Standard Owner or through existing Delegated Authority arrangements.
- Corrective actions shall be enforced if **non-approved** variations are discovered through functional checks (e.g. engineering verification visits, audit or Operations Self-Assurance).

Green – Guidance

- Guidance is based on good practice. Guidance represents supporting information to help achieve **Red** and **Amber** requirements.
- Guidance shall be presented with a dotted green sidebar **and with the word “should” (usually in notes) or as a direct instruction**.
- Guidance is **not mandatory** and is not monitored for compliance.
- Alternative solutions may be used. Alternative solutions do not need to be formally approved.
- Decisions made by a competent person to use alternative solutions should be backed up by appropriate evidence or documentation.

Ref:	SSI 8505D
Issue:	6
Date:	05/09/2015
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Issue record

Issue	Date	Comments
5	Feb 2002	5 th Issue
6	05/09/2015	AMD 04/01 (7) incorporated .

Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 06/12/2015.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Stage 3 (Option Selection) to continue to comply with the issue of any relevant Network Rail standards current when GRIP Stage 3 was completed and not to comply with requirements contained herein, unless stipulated otherwise in the scope of this standard.

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Ref:	SSI 8505D
Issue:	6
Date:	05/09/2015
Compliance date:	06/12/2015

Contents

1 Introduction	5
2 ISSR Preparation	5
3 EPROM Programming and Memory Module Preparation	6
4 On-site Simulator and Log Analysis Data	6
4.1 Management of Files for SSI Graphical Replay	6
5 Memory Module Installation	8
5.1 Pre-installation	8
5.2 Install Memory Modules	9
5.3 Post-Installation	10
6 On Site Data Testing	12
7 Commissioning	12
8 Withdrawal from Service	13

Ref:	SSI 8505D
Issue:	6
Date:	05/09/2015
Compliance date:	06/12/2015

1 Introduction

This chapter defines the processes to be adopted following the completion of the Data Production processes defined in Chapter C, in order to install, test on site, and commission the data into service. It also defines the procedure to be adopted for the withdrawal of superseded data.

This document relates solely to the SSI-specific aspects of the defined processes. The general considerations [of NR/L3/SIG/11303](#) and [NR/L2/SIG/30014](#) continue to apply.

It is the responsibility of the Data Manager to confirm that all required activities in this Chapter (with the exception of testing) are carried out and a clear understanding shall be reached with the Tester as to the scope of the work.

2 ISSR Preparation

Before work can commence, a master copy of the associated CISR shall be available for each affected CI, endorsed in Part 2 to allow programming to commence. An ISSR shall be prepared for each CI before installation commences.

Care shall be taken in selecting an appropriate ISSR as three different ones are available; one for category 2A/2B schemes, the second for category AL3A schemes and the third for WS3A schemes.

Initially, a new ISSR shall be prepared by one person and independently checked by another person. All information except MM Record details shall be added at this stage.

As much information for the first page as possible shall be obtained from the previous ISSR (if applicable), this being checked to see if it is still current, and changed where required. The ISSR shall bear the same serial number as the CISR, and the program issues shall be those specified in the master copy of the CISR for this data. Compatibility of equipment marks, modification states and programs shall be checked to the latest issue of [SSI8150](#).

For Section 4 of the ISSR, the data EPROM and Interlocking Version Number details shall be obtained from the CISR. The total number of MMs of each type dictates how many production data EPROMs shall be programmed. See also Chapter E for details of the minimum number of spare MMs for maintenance purposes. It is advisable that a pool of MMs should be held at each Control Centre for the purpose of any future data changes.

All existing information that is still current shall be transferred to the new ISSR so that the new ISSR is fully completed. The new ISSR shall accurately reflect the state of the installed interlocking. See Section 5.3.4 for further details on documentation completion and handover.

See Figure D1 for an example of a completed ISSR for a category 2A/2B scheme. (Items underlined have been added to the blank form, and signed initials have been shown printed.) Blank Forms for the three ISSRs are included with this document, and these blanks shall be used unless facilities are provided for ISSR generation on the data preparation tools in use (e.g. DWS).

Ref:	SSI 8505D
Issue:	6
Date:	05/09/2015
Compliance date:	06/12/2015

3 EPROM Programming and Memory Module Preparation

EPROMs shall be programmed and Memory Modules prepared as described in Chapter G.

4 On-site Simulator and Log Analysis Data

Display data for use with the Technicians Terminal trackside display (on-site simulator data) shall be recorded onto TTLR removable media for on-site use when commissioning the control system and interlockings.

The following Technicians Terminal trackside display (on-site simulator data) and 'tag' files shall be supplied to the site Maintenance Team for use in log analysis:

File.001 – the on-site simulation data;

<Interlocking>.tag – one tag file for each interlocking.

When SSI Graphical Replay is to be used for log analysis, the following files are required, as described in the user manual:

File.001 – the on-site simulation data for SSI GR V1.1

or

<Picture>.map – one or more sets of on-site simulation data files for SSI GR V2 and later;

<Interlocking>.tag – one tag file for each interlocking;

Interlocking.ini – the interlocking configuration file;

Request.out – the internal telegram requests file.

Data for use with log analysis software (log analysis data) shall be recorded onto TTLR removable media appropriate to the site or PC-format floppy disks.

The associated CISR serial number shall be shown on the labels of these media and/or disks.

It is recommended that the on-site simulator data and log analysis data files are stored on the same TTLR removable medium; alternatively, PC-format floppy disks or Compact Disc (CD) may be used.

4.1 Management of Files for SSI Graphical Replay

4.1.1 Descriptions of the Files

SSI GR requires the following files to be present in order to replay logged data (see "SSI Graphical Replay User Guide" [SSI8509](#) for additional details). It is important that these files correspond to the track layout, infrastructure and configuration installed on site at the time of the logging, otherwise incorrect or misleading information may be displayed when the logged data is replayed.

Picture file '<Picture>.map'

This file, which is the picture file used for on-site simulation as defined in [SSI8505-F](#), defines the track layout displayed on the SSI GR. The file can be a composite