

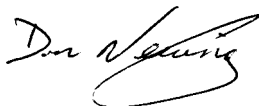
DIS105

Override Emergency Route Setting

Issue 6

Author:

A. Beal, Westinghouse Rail Systems.



Approved by:

Chairman, SSI Applications Group

This document contains 5 pages and was approved at Issue 6 by SSIAG as a site-specific application at its meeting of 05/12/2001, and the scope of approval was amended by SSIAG for general application, where equivalent circumstances apply, at the meeting of 10/02/2010. The content of the body of the document remains unchanged.

This document forms SSIAG's interim guidance on this topic pending the production of an update to the relevant chapter(s) of the SSI Applications Manual.

Distribution: (this issue only)

M Twigg
A Elvins
W Billett
A C Dumbill
S Taylor
K Ireland
P Matthews
N T Smith
J Cooper
Chairman and Secretary
A Hunt
B Young
S Crocker
L Twigge

Network Rail, Manchester
Network Rail, London
Network Rail, London
DeltaRail Group, Derby
Atkins Rail, Birmingham
Invensys Rail, York
Signalling Solutions, Derby
Invensys Rail, Chippenham
Signalling Solutions, Birmingham
Lloyd's Register Rail, Derby
SCSWG Secretary, Network Rail
SPG Secretary, Network Rail
Network Rail STPE, Birmingham
Network Rail, York

This page is intentionally blank.

.....

Override Emergency Route Setting

1. Document Status

This document was approved by the SSI Signalling Principles Group at its meeting on 5th December 2001, subject to subsequent minor revisions which have been checked and approved by the Chairman of the Group.

2. Purpose of paper

To discuss an SSI version of the existing GEC Geographical interlocking controls for the Override Emergency Route Setting facility, specifically for use at Finsbury Park. This document is limited purely to the Override interlocking controls and is not to discuss other operational or technical features of this scheme.

3. Operation

The Finsbury Park interlocking (existing and replacement) is located at Finsbury Park and is controlled from Kings Cross Signal box. The panel at Kings Cross communicates with the Finsbury Park SSI panel processor via a TDM system.

An Override Route Setting facility is provided for all remote interlockings controlled from Kings Cross. These are designed to be used in the event of a TDM failure between Kings Cross and a remote interlocking. This facility is required to keep a minimum service running by setting a pre-determined set of strategic routes. The Override is switched into use by the signaller at Kings Cross and is sent to the remote interlocking via an independent Reed transmission system.

4. Application

The Override switch at Kings Cross has three positions, when in the centre position the Panel/interlocking is operating normally, if turned one position to the left from centre SGRC is selected and when turned one position to the right from centre Override Emergency Route Setting is selected. The ESOC has a separate button and operates via the Reed system between Kings Cross and Finsbury Park.

The existing separate Override transmission system has been retained and a front contact of the controlling relay ((TDM)DISABLE) is utilised for an input to the SSI via a TFM.

When switched into Override, the interlocking ignores any panel requests that are non-strategic route requests by testing a (TDM)DISABLE latch in the PRR file. This prevents any spurious requests from the failed TDM system being actioned by the interlocking.

The override data normalises any routes that are non-strategic (see section 5.2 below). Points required by the strategic override routes are keyed to the centre position regardless of the key position before the TDM failure. At some Control Centres provided with Override controls, before the points within the strategic routes can be called the dead tracks over the points must be proved clear for 15 seconds. This feature is not provided at Kings Cross. Once the non-strategic routes have been normalised, panel requests are issued from the IPT for the pre-determined strategic routes and then the auto-working bit is set for each of these routes. The order in which strategic route requests are processed takes into account any complicated swinging overlaps and forces the position of the overlap by setting the forward route first.