

TECHNICAL INSTRUCTION		TI 171 Issue 1 10/08/2012 Page 1 of 2
		NETWORK RAIL - SIGNAL ENGINEERING Supplementary Point Detection – Recording and Testing
Relevant Standards	NR/L2/SIG/11201, NR/L2/SIG/30014, NR/GN/SIG/11772 & TI143	

Purpose

A change to the number of detection elements associated with a set of points can require significant documentation and testing. This instruction provides rules to enable efficient renewals and upgrades of S&C layouts.

Scope

This TI relates to a change in the number of supplementary detection elements when S&C units are being renewed. A change may arise from a change in point operating mechanism, rail profile or switch type. It applies to signalling designers, testers, and project engineers.

Compliance requirements

This TI is to be implemented forthwith.

Background

The Signalling Design Handbook NR/L2/SIG/11201, Module A18, section 9.1.5, states that the existence of supplementary detectors on an individual point end requires to be separately identified on control tables. This is normally taken to mean that every route control table detecting that point end requires to show such information.

When the scope of a S&C renewal (which otherwise does not require any alteration to the controls of the routes in question) includes changes to supplementary detection, this generates a change to the relevant route control tables – and the production of Testing Copies of those tables.

This is then interpreted as being a change to the Route Controls requiring Principles Testing, and a reclassification of what would otherwise be a Module 3B/4 activity into the Module 2 category.

Analysis

It will never be the case that a signal or route will not require to detect all detection elements of a single point end, and there is therefore no underlying reason or logic to show such information on route control tables.

Originator's Details:- Harry Archibald Network Rail harry.archibald@networkrail.co.uk
PUBLISHED UNDER NR/L2/SIG/11120

TECHNICAL INSTRUCTION

TI 171
Issue 1
10/08/2012
Page 2 of 2

An alternative would be to record the presence of supplementary detection only on the point control tables, which may have been the practice in some cases in the past.

A further option would be to record the presence of supplementary detection on the signalling plan, but this could generate a change and/or update when one was otherwise not required. The fundamental requirement remains the depiction of the point detection arrangements, in full, in location or REB wiring diagrams, and for any changes to be subject to normal design and localised testing procedures.

Action Required

1. Where the number of supplementary detectors is amended and are currently included on the control tables for the site then these shall be recorded in an as – built records update, only, of relevant signal or route control tables, where these do not otherwise require alteration.
2. Where the number of supplementary detectors is amended and the number is not currently included on control tables for the site, then there is no requirement to record the change on the control tables provided all the detection elements are combined prior to input to the interlocking system.
3. The addition (or reduction) of supplementary detection elements does not constitute Principles Testing and shall not, of itself, require the involvement of a Module 2 Principles Tester.

Staff to be Briefed

Role	Responsible for Briefing
Head of Asset Management [S&T]	Author
Route Asset Managers [Signalling]	Head of Asset Management [S&T]
Signal & Telecoms Maintenance Engineer	Route Asset Managers [Signalling]
Section Manager (Signals)	Signal & Telecoms Maintenance Engineer
National Signal Design Group Manager	Author
S&T Trainers (Workforce Development Specialists)	Author
Programme Engineering Manager (Test & Commissioning)	Author