

TECHNICAL INSTRUCTION

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NETWORK RAIL - SIGNAL ENGINEERING

Management and Maintenance of Un-Worked Points in Running Lines

Relevant Standards: NR/L2/SIG/11704, NR/WI/TRK/001, NR/L3/TRK1202, NR/L2/SIG/10064 & NR/L3/SIG/10663

Background

The provision of un-worked trailing points for use in engineering possessions was an accepted practice on the former Southern Region of British Rail. Following an incident involving clipped and padlocked un-worked points installed in a running line, an investigation into the management and maintenance has taken place. The purpose of this was to review current practice with a view to standardising the maintenance and inspection regime within Network Rail.

This instruction covers the management of the 17 installations still remaining on the network in Kent, Sussex and Wessex and 3 other sites outside the former Southern Region. All are listed in Appendix A.

Purpose

This Technical Instruction sets out the requirements for the long term existence of Un-Worked Points on Network Rail's infrastructure. It should be read in conjunction with a Non-Compliance against NR/L2/SIG/11704 (TRACKER Ref: 6606) and applies **ONLY** to the sites listed in Appendix A.

Scope

All Un-Worked points listed in Appendix A

Abbreviations & Definitions

FWC - Free Wheel Clearance
RSO - Residual Switch Opening
S&C - Switches & Crossings
DU - Delivery Unit

Compliance Requirements

On publication of this TI.

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Un-Worked Points

'Un-Worked Points' are defined as S&C installed with switch rails connected with "p-way" stretcher bars according to the standard designs, but with no connection to, or detection by, the signalling system, i.e. neither lock nor detection; and are not attached to a point machine or other operating mechanism such as Train Operated Points or Spring Points.

Un-worked points are rarely installed in running lines and where they are provided; they are normally used as emergency crossovers and are occasionally used to facilitate the movement of engineering trains when used in conjunction with within absolute possessions.

Risks during normal running are managed by a combination of clamping the closed switch rail tightly and scotching the open rail. These measures are subject to regular inspection. All crossovers are **trailing** to normal direction moves.

Current Standards

The facilities for securing points are documented in NR/L2/SIG/11704 (Issue 1, March 2008). In particular, this specifies the time interval between the installation of points that are 'un-worked' (as described above) and the provision of some means of interface with the signalling system. In particular, '11704' states that *"Exceptionally, points may be left un-detected in running lines for longer than 2 months providing a risk assessment has been carried out, any identified safety measures are in place, and the risk assessment is endorsed by the Head of Signal Engineering and Head of Track Engineering."* [Para 15.3.3]. The extension of the two month time interval is then limited by para 15.3.4 which states: *"Points shall not be left undetected in running lines for longer than 6 months."*

Standard Instructions for the Inspection, Maintenance and security of Un-worked Points in Running Lines

There are currently 20 sites where there are clipped and padlocked un-worked points on Network Rail's infrastructure. These sites listed in Appendix A.

It is proposed that the un-worked points at these sites will either be connected to the signalling system or removed. In the mean time, this Technical Instruction sets out the requirements to manage the risk arising of them remaining in situ.

Requirements for the security of Un-Worked Points in running lines

All of the following measures shall be applied:

- Each switch shall be secured with 2 x point clips – one at the toe and one at the back of the planing.
- A fishplate (or Switch Securing Block) shall be fixed to the bearer at the switch toe and used to hold the closed switch against the adjacent stock rail.
- Points shall be scotched at the front with a scotch. On switches with concrete bearers Switch Securing Blocks shall be used to secure both the open and closed switch.
- On completion checks shall be made to confirm that FWC and RSO on the through route are correct.
- Dedicated, unique locks for each point end shall be used to secure the clips and the keys held by the Section Manager (Track) responsible for the section of line concerned. The Section Manager (Track) shall issue the keys only when the line is under Engineer's possession, or as part of other authorised planned work.
- Only competent persons under the direction of the Section Manager (Track) shall clip and scotch points.