Certificate of Derogation from a Railway Group Standard

(in accordance with part 6 of the Railway Group Standards Code)

1. Type of deviation

Deviation Number: 13/065/DGN

Derogation

2. Details of applicant:

Network Rail, C/O , The Quadrant: MK, Furzton, Floor 3, Desk 054, Elder Gate, Milton Keynes, MK9 1EN

3. Your reference number:

Tracker No. 13380

4. Status of applicant:

Infrastructure Manager, RSSB Member

5. Title of certificate:

Engineers' Possession Reminder (EPR) Line Blockages

6a. Details of Railway Group Standard (RGS):

RGS Number:	Issue No:	Issue Date:	Title:
GE/RT8000/HB8	Two	March 2012	IWA, COSS or PC blocking a line

6b. RGS clause(s):

2.2

6c. RGS clause requirements:

“2.2 You must arrange for at least one of the following additional protection arrangements, as shown in section
2.3 to 2.6, to be provided on the line to be blocked if the work will affect the safety of the line.
You must agree with the signaller what additional protection will be provided. The signaller will not give you an authority number until the additional protection is in place.”

7. Scope of deviation:

National. Will apply anywhere on the Network Rail managed infrastructure where EPR is provided.

8. Impacts of complying with the current RGS requirement:

The derogation will apply to the use of Engineers' Possession Reminder (EPR) as an alternative means of providing additional protection for line blockages. In signalling centre areas using Visual Display Units (VDU) based signalling systems, modern day axle counter train detection and working under Track Circuit Block signalling regulations.”

The current rules concerning line blockages mandate four methods of additional protection: detonators, disconnections, T-CODs, and tokens. In signalling centre areas using axle counter train detection and working under Track Circuit Block signalling regulations, it is not practicable to use T-CODs or tokens. Moreover, with the introduction of clearer line blockage rules in December 2010 and Network Rail's continuing policy of encouraging the use of line blockages in preference to safe systems of work using lookout warning, there has been a significant increase in the number of line blockage requests (between 25-135% on EMCC workstations) which has highlighted limitations with the other methods of additional protection available.

In the case of disconnections, the average time for completing the process between the signaller and signalling technician is 15 minutes and the process is vulnerable to disruption or abandonment if the signalling technician is called upon to attend to faults and failures. Where detonators are used, the process either requires the diversion of existing work group resources or additional work group resources to undertake protection activities compared with disconnections.

No action is required at this stage. The previous temporary non-compliance was arranged to trial the concept and this deviation is to apply the concept nationally.

9. Proposed alternative actions:

Network Rail is seeking to expand the use of EPR as an option of a more efficient method of providing additional protection in signalling centre areas using VDU based signalling systems, modern day axle counter train detection and working under Track Circuit Block signalling regulations.

The proposed alternative is to continue with the current arrangements for additional protection for line blockages, utilising the available options or explore more innovative methods such as EPR which has been under trial conditions at EMCC under temporary non-compliance 12/074/TNC without any recorded incidents.

EPR is an enhanced reminder appliance and provides a higher level of security compared with conventional reminder appliances because it requires the use of both tracker ball and keyboard actions by the signaller, requires a positive system command confirmation by the signaller before it can be removed, and can only be removed after another signaller, supervisor or manager has checked and confirmed that all the conditions for removal have been met.

By comparison with the existing methods of additional protection, the proposed alternative method will only deviate from the existing rules set out in Module TS1 Clause 13.2 and Handbook 8 in the following respects:

1. The RT3180 (signaller) and RT3181 (Controller of Site Safety (COSS)) forms will have an additional box added identifying EPR as an alternative option for additional protection.
2. The COSS, Individual Working Alone (IWA) or Protection Controller (PC) will ask the signaller to apply EPR rather than arrange for a disconnection.
3. The signaller will apply and remove EPR following confirmation with the COSS, IWA, PC and in accordance with the box instructions for operation of the EPR

No incidents have been reported during the trial use of EPR under 12/074/TNC (Tracker No 10546).

10. Impacts of the alternative actions:

The use of EPR to provide additional protection is predicted to be possible without introducing any significant new risks or materially increasing the existing residual risks associated with the four existing methods of additional protection mandated within the Rule Book. Furthermore, it involves a minimal amount of procedural change for the COSS, IWA and PC roles and, in the case of signallers, they will be utilising equipment and procedural arrangements with which they are already familiar for other purposes.

The potential benefits of using EPR by comparison with other methods of additional protection have been identified as follows:

- A reduction in the number of ground staff required to work on or near the line to provide protection.
- A reduction in the time required to apply and remove the protection because all the resources necessary are located in close proximity within the same signalling location. This potentially increases the number of line blockage opportunities available for carrying out work that affects the safety of the line.
- Removal of reliance on signalling technicians who may not be available to deal with line blockage disconnections if called to deal with faults and failures.

- A reduction in location identification errors and a significant reduction in the time required to apply and remove protection where the site of work is within a more complex signalling area which requires more than one protecting signal. EPR has the facility to apply protection to a Standard Engineering Area which enables several protecting signals to be placed/maintained at danger simultaneously with an activated EPR. The SEA also provides an additional visual reminder to the signaller on his display screen and provides a further point of geographical reference for all staff involved to supplement the traditional signal blocking points.

11. What other options have been considered?

Consideration has been given to providing dedicated signalling technician resources to undertake disconnections for line blockages. However, this will have no material impact on the process time for transacting the disconnection and is likely to result in unproductive time within the technician's working day because they can't be utilised on faults and failures without potentially disrupting line blockage activities.

Consideration has also been given to utilising detonator protection to provide additional protection. However, for activities involving small work groups this either involves the provision of additional resources or the diversion of resources from within the group to undertake protection duties. The former involves additional staff being exposed to the risks of working on or near the line and the latter either reduces the amount of work accomplished within the line blockage or increases the duration of the line blockage.

12. Consultation with affected parties

The affected parties are all within the Network Rail Network Operations Function. The staff of other duty holder organisations will only be permitted to use EPR subject to consultation with the duty holders concerned and their agreement which will include full briefing of the participants.

13. Additional actions/observations:

Upon receipt, the applicant is required to identify affected, interfacing parties and copy this certificate, together with supporting information, to those parties.

This certificate follows temporary non-compliance which expires on 28/05/2013 (Tracker No 10546).

Attachments:

- Engineer’s Possession Reminder (EPR) Report.

14. Method of elimination:

N/A

15. Start and end date:

N/A

16. Signature of applicant:

Head of Operations Principles and Standards

Date of application:

29/04/2013

17. Lead Standards Committee details:

Name of Committee:	Date of meeting	Minute reference:
Traffic Operation and Management	21/05/2013	13/TOM/05/101

Authorised by:

Signed by Steve Roberts on 11/06/2013

Steve Roberts
Head of Delivery, Traffic Operation and Management

Date of Authorisation:

11/06/2013