

Deviation Certificate

(In accordance with the Railway Group Standards Code and Standards Manual)

Deviation number: 22-011-DEV

1. Problem statement

Currently, with the change in the way staff have access to the track and the reduction in red zone working, Network Rail is looking at ways of providing additional protection to the workforce; the use of additional protection at the protecting signal is effective but can require an individual to be working alone, placing detonators or Track Circuit Operating Devices (TCODs).

2. Title of deviation certificate

Additional protection to Track Workforce.

3. What is the requirement you can't comply with?

Requirement Number:	Document Number:	Issue Number:	Issue Date:	Title of document:
13.2.4	GERT8000-TS1	15	04/09/2021	General signalling regulations
4	GERT8000-HB8	8	04/09/2021	IWA, COSS or PC blocking a line
2.2	GERT8000-HB21	5	04/09/2021	Safe work leader (SWL) blocking a line

GERT8000-TS1:

13.2.4 Additional protection

The COSS, IWA, PC or SWL may request the use of additional protection, but must always provide or request you to provide additional protection if the work will affect the safety of the line.

You must agree with the COSS, IWA, PC or SWL which of the following additional protection methods will be used.

- A signalling technician disconnecting signalling equipment.
- The COSS, IWA, PC or SWL operating a lock-out device.
- The COSS, IWA, PC or SWL placing one or more track circuit operating devices (T-COD).
- The COSS, IWA, PC or SWL activating one or more remotely-activated track circuit operating devices (T-COD).
- The COSS, IWA, PC or SWL getting the token.
- The COSS, IWA, PC or SWL providing detonator protection.
- Applying engineering possession reminders (EPRs).

Disconnecting signalling equipment

If additional protection is to be provided by disconnecting signalling equipment, you must agree the necessary disconnections with the signalling technician. You must tell the COSS, IWA, PC or SWL when the disconnections have been made.

Operating a lock-out device

If additional protection is to be provided by operating a lock-out device, the COSS, IWA, PC or SWL must operate the device before you grant the line blockage.

T-COD A T-COD can only be used if all the following conditions apply.

- Use at a particular location is authorised by the Sectional Appendix.
- The signalling equipment is working normally at the time the T-COD is to be placed on the line.
- The work will not affect the correct operation of the track circuit concerned.

When the protecting signal has been placed to danger or the route has been closed, you must check that the track circuit concerned is showing clear. You can then give permission to the COSS, IWA, PC or SWL to place the T-COD on the line.

When the COSS, IWA, PC or SWL tells you that the T-COD has been placed on the line, you must check that the track circuit is showing occupied.

Remotely-activated T-COD

A remotely-activated T-COD can only be used if all the following conditions apply.

- Use at a particular location is authorised by the Sectional Appendix.
- The signalling equipment is working normally at the time the T-COD is to be activated.
- The work will not affect the correct operation of the track circuit concerned.

You must make sure that:

- if the track circuit is beyond a controlled signal, the signal has been placed to danger
- if the track circuit is on an ERTMS line, the route has been closed
- if the track circuit is beyond an automatic signal, no train is approaching the signal
- the track circuit concerned is showing clear.

When the COSS, IWA, PC or SWL tells you that the T-COD has been activated, you must check that the track circuit is showing occupied.

Getting the token

If additional protection is to be provided by getting the token, the COSS, IWA, PC or SWL must get the token before you grant the line blockage.

Detonator protection

If additional protection is to be provided by detonator protection, the COSS, IWA, PC or SWL will arrange for it to be placed:

- at the protecting signals or block markers for the line blockage, or
- clear of any points or through-crossing that will be used for normal train movements.

Engineering possession reminders (EPRs)

Where authorised in Signal Box Special Instructions, you must protect the line blockage by applying the appropriate EPRs.

GERT8000-HB8:

4 During the line blockage

4.1 Protection at the site of work When you have been given the authority number, you must place a red flag or red light on the approach to the site of work if:

- the work will affect the safety of any approaching train, or
- a group is working.

You must make sure that the red flag or red light is placed in the four-foot where it will be clearly visible to the driver of a train approaching on that line.

GERT8000-HB21:

2.2 Additional protection

You must arrange for at least one of the following additional protection arrangements, as shown in sections 2.3 to 2.9, to be provided on the line to be blocked whenever this is possible. However, you must always do so 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.

4. Why can't you comply with the existing requirement?

This is to add additional safety in placing site of work protection using a T-COD or disconnection.

5. Where can't you comply with the requirement?

This is to add additional safety in placing site of work protection using a T-COD or disconnection.

It is intended this alternative could be applied anywhere on the Network rail network where T-CODs are permitted to be used as additional protection, or on any occasion when a group includes a person competent to undertake disconnections.

6. What are you proposing to do instead of the existing requirement?

The proposal is use T-CODs or Disconnections at the site of work rather than detonators, this will give added protection the staff working, as there will be an additional signal being held at danger.

7. How long would you like the deviation to last and is there anything that would affect the length of the deviation?

Start date	End date
19/04/2022	31/12/2023

The deviation is intended to be valid until corresponding Rule Book changes are in force.

8. Demonstrate that what you are proposing to do instead is reasonable.

The primary means of protection for a line blockage is implemented by the signaller. Ordinarily, this involves the signaller replacing signals to danger and applying reminder devices to the relevant signals. Alongside this, additional protection may be utilised to further shield the site of work from inadvertent action taken by the signaller.

T-CODs are a useful and flexible form of additional protection that can be used across much of the network. However, the requirement to place them at a location to hold the protecting signal to danger can be prohibitive. In some cases, this will involve an individual travelling away from the work group to apply the T-COD. This may result in the individual working alone, may use resources that are not available, and may impact the ability to conduct the work in a timely manner. These issues are particularly prevalent in areas with sections of automatic signals.

Full HAZID workshop notes and documentation attached.

9. Demonstrate consultation with all affected parties has been carried out and their agreed support.

Consultation has been carried out within Network rail as the only affected duty-holder.

10. What alternative options have been rejected and the rationale?

No alternative options available.

11. What supporting documents/information are you providing?

- 1) Draft HAZID Report Ref. HAZID/SX-MTCOD Issue 1 Issue 1.0 dated 16/02/2022;
- 2) Rules changes required for Handbooks 8 and 21;
- 3) Proposed Rule Book TS1;
- 4) Briefing document: Network Rail Sussex Site of Work Protection.

12. Is the certificate for a project requiring authorisation for placing in service under the Railways (Interoperability) Regulations 2011?

No

13. Applicant details and status

Applicant job title	Applicant company/ organisation	Applicant company/ organisation address
Operations Principles and Standards Expert, System Operator	Network Rail	The Quadrant: MK, Desk MIK-03-B-16, Elder Gate, Milton Keynes MK9 1EN

Applying as:

- The party who must currently comply, or may reasonably be expected to have to comply in the future, with the requirement.

Your reference number

TR71743

Applicant's signature	Operations Principles and Standards Expert, System Operator	Date	15/02/2022
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Name of Committee	Date of meeting	Minute reference
Traffic Operation and Management	29/03/2022	TOM/03292022/6.2

Authorised by Director of Standards:	Date of Authorisation:
Approval No. 3468	19/04/2022