

Protecting rail traffic

Introduction

Protection is required if:

- rail traffic is disabled, or
- rail traffic obstructs, or might obstruct, adjacent lines, or
- the line is obstructed.

Delayed rail traffic

Train Crew or Track Vehicle Crew

1. If possible, get the Signaller's assurance that immediately following rail traffic has been or will be stopped.
2. No further protection is necessary if:
 - the Signaller has given an assurance that immediately following rail traffic has been or will be stopped
 - a train or track vehicle is standing at a signal at STOP behind the delayed train, and the Driver or Track Vehicle Operator has given an assurance that they will not pass that signal.
3. Place protection if:
 - the Driver or Track Vehicle Operator has not given an assurance that rail traffic standing at the signal behind the delayed train will not pass the signal, and
 - you cannot speak to the Signaller to get their assurance that immediately following rail traffic has been or will be stopped.

network procedures

Protecting rail traffic

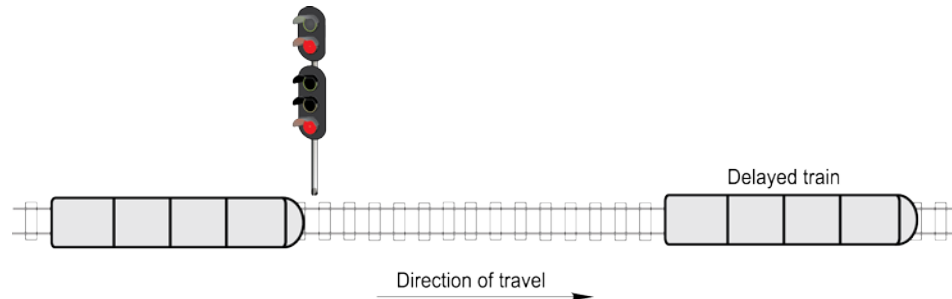


FIGURE 1: Rail traffic standing at a signal at STOP with assurance from the Driver or Track Vehicle Operator. No further protection of the delayed train is necessary

4. Place three Railway Track Signals on the line at the nearer of:
 - 500m behind the delayed rail traffic, or
 - the first signal at STOP behind the delayed rail traffic.

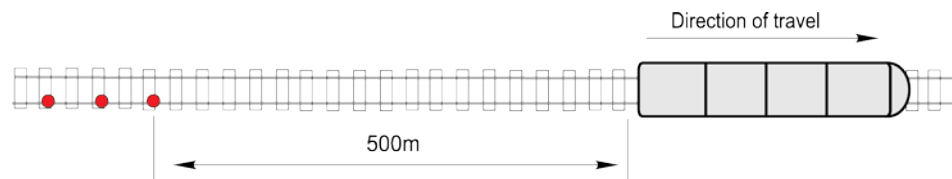


FIGURE 2: Railway Track Signals placed at 500m to protect disabled rail traffic from following rail traffic

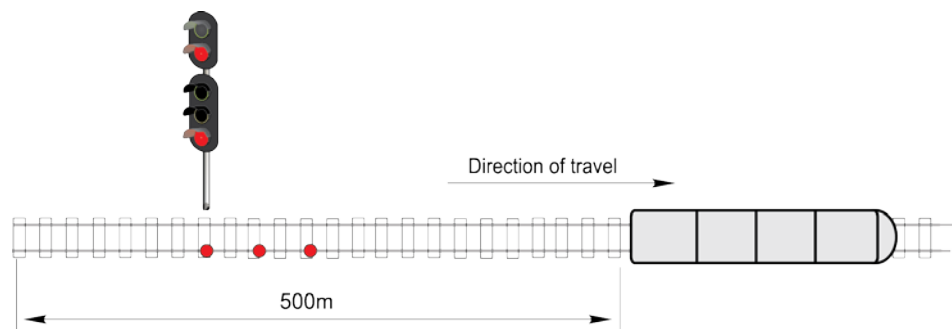


FIGURE 3: Railway Track Signals placed at the first signal at STOP behind a delayed train to protect it from following rail traffic

5. Return to the rail traffic.

Protecting rail traffic

Disabled rail traffic

Train Crew or Track Vehicle Crew

1. Secure the rail traffic.
2. Tell the Signaller that this has been done.
3. Ask the Signaller about the direction from which assistance will approach.

Assistance from behind

4. No further protection is necessary if:
 - the assistance will come from behind, and
 - rail traffic is standing at a signal at STOP within 500m behind the disabled rail traffic.
5. If there is no rail traffic standing at a signal at STOP within 500m behind the disabled rail traffic, place three Railway Track Signals on the line at the nearer of:
 - 500m behind the disabled rail traffic, or
 - the first signal at STOP behind the rail traffic.

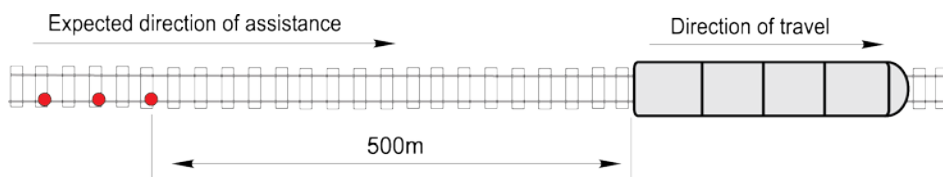


FIGURE 4: Railway Track Signals placed 500m behind disabled rail traffic

Protecting rail traffic

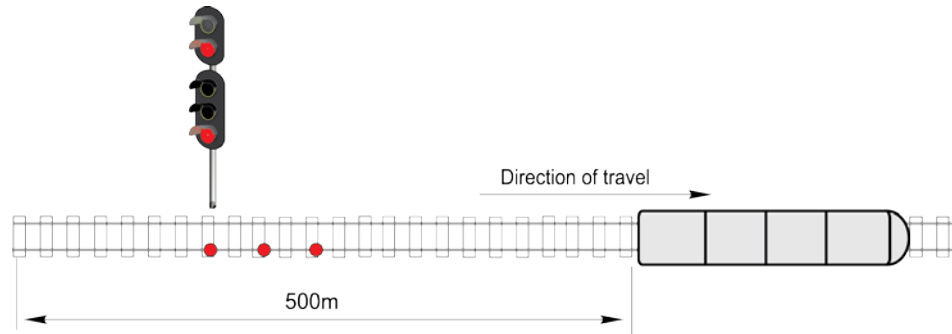


FIGURE 5: Railway Track Signals placed at the first signal at STOP behind disabled rail traffic

6. Tell the Signaller the location of the protection.
7. Return to the rail traffic.

Assistance from the opposing direction

8. If assistance is expected from the opposing direction, place three Railway Track Signals on the line 500m forward of the disabled rail traffic.

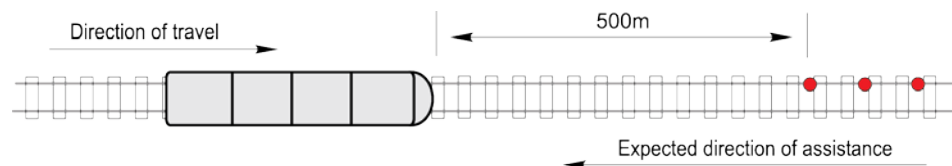


FIGURE 6: Railway Track Signals placed to protect disabled rail traffic from assisting rail traffic approaching from the opposing direction

9. Tell the Signaller the location of the protection.
10. Return to the rail traffic.

Signaller

11. If advice is not included in a Proceed Authority, give the Driver or Track Vehicle Operator of assisting rail traffic a Condition Affecting the Network (CAN) warning. Include the location of the disabled rail traffic and the location of the protection.

Protecting rail traffic

Adjacent or obstructed lines

Protection is needed for obstructed lines, or for the lines adjacent to disabled rail vehicles, if the vehicles are or might be foul of the lines.



NOTE

If possible, give an emergency call to warn approaching rail traffic.

Train Crew, Track Vehicle Crew or Qualified Worker

1. Ask the Signaller to:
 - stop approaching rail traffic, and
 - set signals at STOP with blocking facilities applied.
2. If in track-circuited territory:
 - fasten a track-circuit shorting clip to the heads of the rails of the adjacent or obstructed lines, and
 - if possible, confirm that affected signals show STOP.



WARNING

Do not rely on track-circuit shorting clips as the only safety measure.

3. Get an assurance that other trains in the sections have been stopped.

network procedures

Protecting rail traffic

4. If the Signaller cannot give an assurance that rail traffic has been or will be stopped:
 - place three Railway Track Signals on the affected adjacent lines, 500m from the obstructing rail traffic in the directions of possible approach by rail traffic, and
 - place two Railway Track Signals on the affected adjacent lines at a further 2500m in the directions of possible approach by rail traffic.

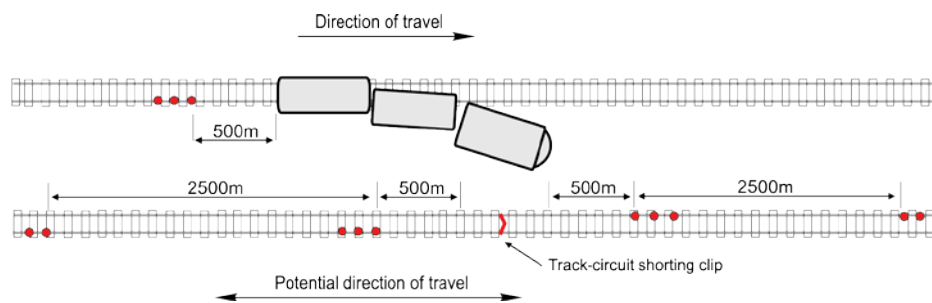


FIGURE 7: Railway Track Signals placement to protect an adjacent line from an obstructing train in bidirectional double-line territory



WARNING

If the adjacent lines are bidirectional, place protection in both directions.

5. Return to the rail traffic.

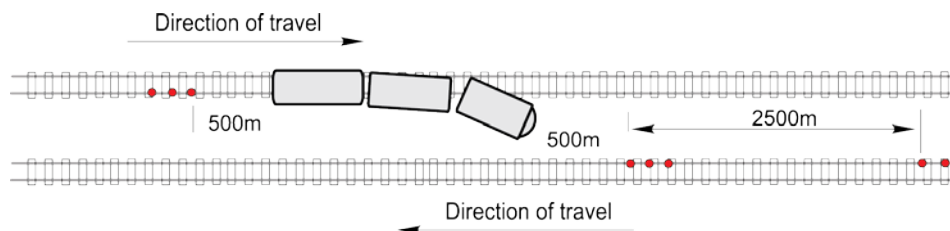


FIGURE 8: Railway Track Signals placement to protect derailed rail traffic and the adjacent line

Protecting rail traffic

Protecting obstructions near tunnels

Follow these steps if a tunnel is near the area to be protected.



NOTE

Do not place Railway Track Signal protection inside tunnels.

Train Crew, Track Vehicle Crew or Qualified Worker

1. Talk to the Signaller and:
 - ask them to have controlled absolute signals on affected lines set and kept at STOP with blocking facilities applied, and
 - get an assurance that rail traffic in affected sections have been stopped.
2. If the obstruction is closer than 500m to a tunnel, place:
 - three Railway Track Signals on affected lines at the near opening of the tunnel, and
 - a second group of three Railway Track Signals on affected lines beyond the far opening of the tunnel, and
 - two Railway Track Signals at a further 2500m in the direction of approaching rail traffic.

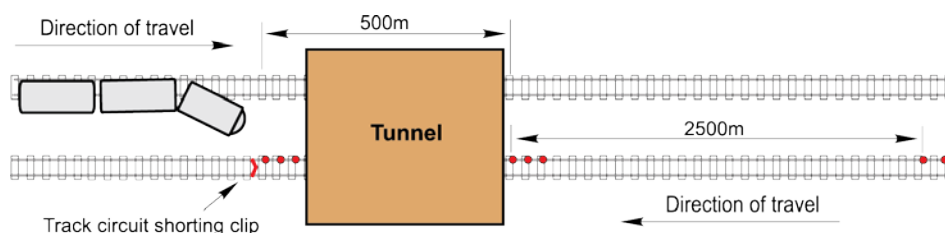


FIGURE 9: Railway Track Signals placement at a tunnel exit and at 500m from obstruction

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Protecting rail traffic

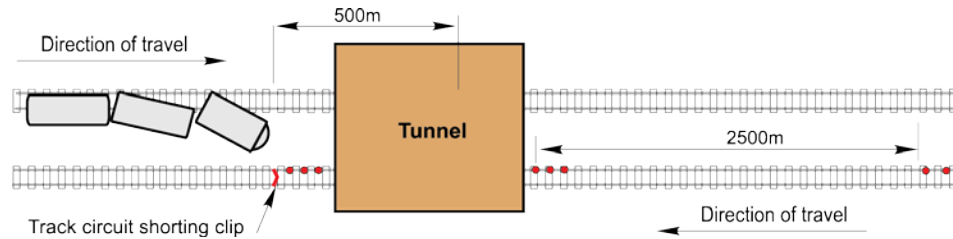


FIGURE 10: Railway Track Signals placement at the entrance and exit of a tunnel if the 500m distance from the obstruction falls inside the tunnel

Network Procedures

NPR 709 Using Railway Track Signals

NPR 712 Protecting work from rail traffic on adjacent lines

NPR 721 Spoken and written communication

Effective date

29 April 2017