

work on track

Absolute Signal Blocking

Purpose

To prescribe the rules for working in the Danger Zone using Absolute Signal Blocking (ASB).

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General

ASB excludes rail traffic from a portion of track for a specified period.

ASB may be used if a Protection Officer has assessed that the work to be performed will not:

- involve multiple worksites
- require a work on track authority
- break the track
- alter track geometry or structure.



WARNING

If the safety assessment shows that a work on track authority is necessary, work must be carried out using:

- *NWT 302 Local Possession Authority, or*
- *NWT 304 Track Occupancy Authority, or*
- *NWT 306 Track Work Authority.*

ASB can be used by a single worker, in which case, the worker is also the Protection Officer.

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ASB may be used to exclude rail traffic for work:

- not requiring tools, or
- using tools which can be easily and immediately removed from the track by one person and are:
 - light, non-powered hand tools
 - light, battery powered tools or devices
 - light, powered hand tools.

ASB may be used at Network access level crossings, to allow vehicles to cross the track.



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NOTE

Network access level crossings are defined in *NGE 216 Level crossings*.

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Authorisation

Signallers may authorise ASB where rail traffic can be excluded from a portion of track.

If the ASB requires more than one Signaller to exclude rail traffic from a portion of track, the affected Signallers must:

- confer to make sure that all points of entry are protected
- nominate an authorising Signaller.

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The authorising Signaller must use a system-generated electronic ASB form, or if that is unavailable, an *NRF 018 Absolute Signal Blocking (ASB)* form, to record the ASB details, and issue the protection number to the Protection Officer.

ASB must not be authorised if the nominated worksite location is within the limits of:

- a Local Possession Authority, or
 - a Track Occupancy Authority, or
 - the protection arrangements for a Track Work Authority.
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Protection Officer

At all times there must be a nominated Protection Officer for ASB.

The Protection Officer must:

- be the only person to tell workers about the:
 - locations of safe places
 - safety measures in place
 - extent of the area protected.
- be the only person to speak to the Signaller about safety arrangements
- make sure that the protection is in place before work starts.

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When requesting ASB, the Protection Officer must identify the line and define the worksite location as being between:

- two signals, or
- a signal and a set of points, or
- a signal and the end of a terminal line, or
- a set of points and the end of a terminal line.

Signals and points must be identified by their numbers.



Protecting ASB

The authorising Signaller must make sure that all points of entry into the affected portion of track are protected.

Unless otherwise specified in this Rule, as a minimum, an ASB worksite must be protected by:

- at least two consecutive controlled absolute signals kept at **STOP** with blocking facilities applied, or
- at least one controlled absolute signal kept at **STOP** with blocking facilities applied, and:
 - removing an ESML/EOL key, or
 - securing points to prevent access, or
 - there being an easily-reached safe place available and providing a Lookout.

If protecting signals need to be cleared for an alternative route, the Protection Officer and Signaller must agree about the movements and make sure that the worksite is located clear of the alternative route.

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If using Lookouts as part of ASB protection, the Protection Officer must make sure that minimum warning time requirements are satisfied.

Before allowing work to start, the Signaller must make sure and confirm with the Protection Officer that:

- all points of entry into the affected portion of track are protected
- there is no approaching rail traffic between the protection and the identified worksite location.

Signallers must not authorise unsignalled movements into portions of track where ASB is in use.

Intermediate sidings

If an intermediate siding is occupied by rail traffic and movements from the siding could enter the affected portion of track, the points for the siding must be secured by:

- the Protection Officer clipping and locking points, or
- the Signaller applying blocking facilities to points release controls.

If the intermediate siding is unoccupied:

- rail traffic must not be authorised to occupy the siding while ASB is in place
- protection against movements from the siding is not required.



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Temporarily suspending ASB

ASB may be temporarily suspended to allow rail traffic movements over the affected portion of track. Before temporarily suspending ASB, the Signaller must make sure that:

- the Protection Officer's name, the worksite location and the protection number provided correspond with details of the ASB to be suspended
- the workers and their equipment are clear of the Danger Zone.

The Protection Officer may ask to re-establish ASB, if agreed to by the Signaller and there is no change of:

- the protection arrangements
 - the worksite location.
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Ending ASB

To end ASB, the Protection Officer must provide their name, the worksite location and the protection number and tell the Signaller that:

- workers and their equipment are clear of the Danger Zone
- ESML/EOL keys that were removed have been restored
- points that were secured are available for use.

The Signaller may end the ASB after making sure that:

- the Protection Officer's name, the worksite location and the protection number correspond with the ASB details
- the track is clear.

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NOTE

If the protection number is not available to end ASB, the Protection Officer must provide:

- their name
- the worksite location
- their contact phone number.

Keeping records

Signallers and the Protection Officer must record, in permanent form, the ASB details.

Network Procedures

NPR 703 Using Absolute Signal Blocking

NPR 708 Using X, Y and Z keys

NPR 711 Using Lookouts

NPR 712 Protecting work from rail traffic on adjacent lines

NPR 751 Calculating Minimum Warning Time

Effective date

24 March 2019