network procedures

Using Absolute Signal Blocking

Introduction

Absolute Signal Blocking (ASB) is a method of working in the Danger Zone by excluding rail traffic from a portion of track.

Requesting Absolute Signal Blocking

Protection Officer

1. Tell the Signaller:
   - your name
   - your contact details
   - your Safeworking designation
   - the type of work
   - the intended duration.
2. Identify the line name and nominate 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.
3. Ask the Signaller to protect all points of entry into the affected portion of track by applying blocking facilities to exclude rail traffic.

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Signaller

4. Confirm the ASB details including:
   - the Protection Officer's name and contact details
   - the type of work
   - the duration of work
   - the line name
   - the nominated worksite location.
5. Use the reference points provided by the Protection Officer to identify the worksite location.
6. Identify if the ASB requires more than one Signaller to exclude rail traffic. If the proposed ASB affects more than one Signaller, the Signallers must nominate an authorising Signaller.

   Signaller/Authorising Signaller

7. Make sure that:
   - blocking facilities have been applied to exclude rail traffic
   - the last rail traffic to enter the affected portion of track is identified and its location is known
   - there is no rail traffic approaching the worksite.

   Authorising Signaller

8. Tell the Protection Officer:
   - that blocking facilities have been applied
   - that the affected portion of track is protected
   - the identification number of the last rail traffic to enter the affected portion of track and its last known location
   - that there is no rail traffic approaching the worksite.

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Protection Officer

9. Confirm with the Signaller:
   - that all points of entry into the affected portion of track are correctly protected
   - the identification number of the last rail traffic to enter the affected portion of track and its last known location
   - that there is no rail traffic approaching the worksite.

Authorising ASB

Authorising Signaller

1. Once the Protection Officer has confirmed the assurances:
   - if required, authorise the removal of the ESML/EOL keys
   - authorise ASB
   - issue the protection number.

Protection Officer

2. Before entering the Danger Zone make sure that:
   - the ASB is authorised
   - the protection number has been issued
   - if used, ESML/EOL keys have been removed.

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Types of ASB protection

Two consecutive controlled absolute signals at STOP

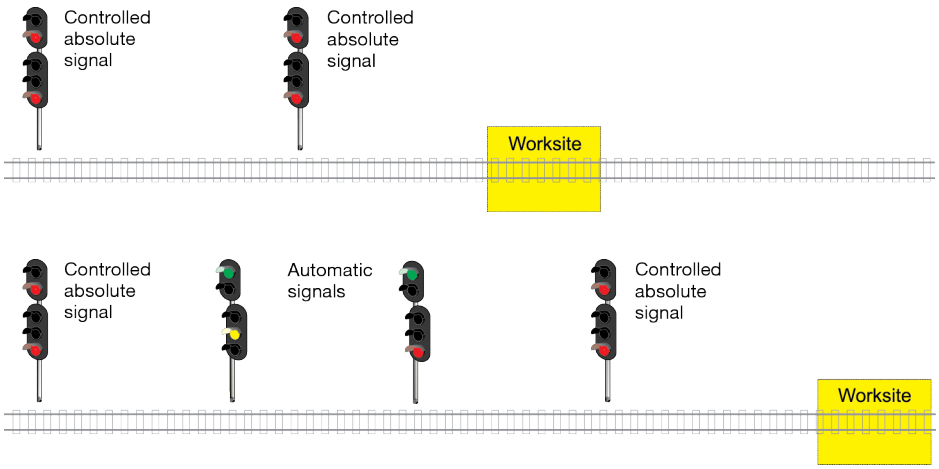

FIGURE 1: Example of protection arrangements using two consecutive controlled absolute signals.

One controlled absolute signal at STOP

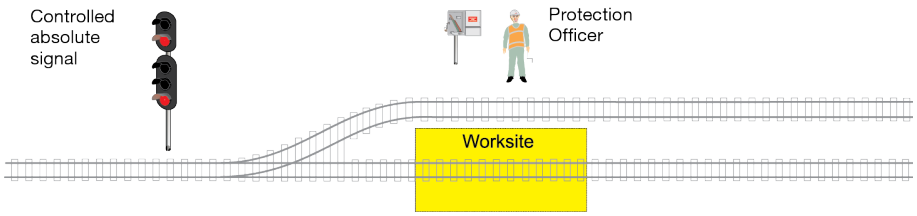

FIGURE 2: Example of protection arrangements using one controlled absolute signal and ESML/EOL key removed.

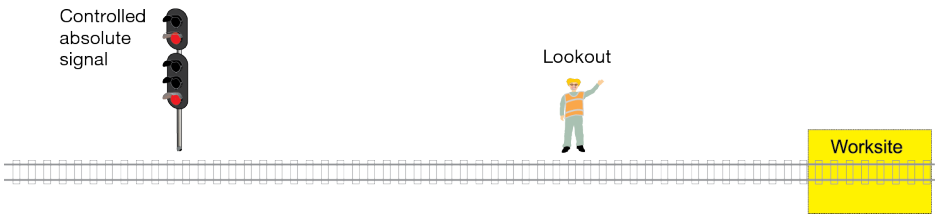

FIGURE 3: Example of protection arrangements using one controlled absolute signal and a Lookout

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NOTE

Workers must immediately move to a safe place when warned by the Lookout about approaching rail traffic.

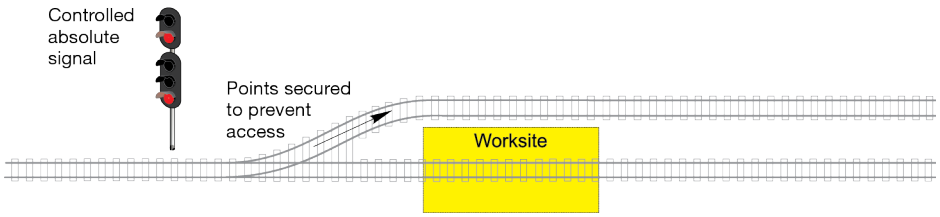

FIGURE 4: Example of protection arrangements using one controlled absolute signal and points secured to prevent access.

Temporarily suspending ASB

ASB may be temporarily suspended if the affected portion of track is required for rail traffic movements.

Signaller

1. Before temporarily suspending the ASB, confirm with the Protection Officer:
   - their name
   - the worksite location
   - the protection number
   - that workers and equipment are clear of the Danger Zone
   - that, if used:
     - ESML/EOL keys have been restored
     - points that were secured are available for use.

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Re-establishing ASB

Protection Officer

2. Ask the Signaller to re-establish ASB.
3. Provide the worksite location and if required the protection number to identify the ASB to be re-established.
4. Tell the Signaller there is no change to the worksite location.

Signaller/Authorising Signaller

5. Confirm the:
   - request to re-establish ASB
   - worksite location has not changed
   - protection number.
6. Before re-establishing ASB make sure that:
   - blocking facilities have been applied to exclude rail traffic
   - the last rail traffic to enter the affected portion of track is identified and its location is known
   - there is no rail traffic approaching the worksite.

Authorising Signaller

7. Tell the Protection Officer:
   - that blocking facilities have been applied
   - that the affected portion of track is protected
   - the identification number of the last rail traffic to enter the affected portion of track and its last known location
   - that there is no rail traffic approaching the worksite.

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Protection Officer

8. Confirm with Signaller:
   - that all points of entry into the affected portion of track are correctly protected
   - the identification number of the last rail traffic to pass the protecting signal and its last known location
   - that there is no rail traffic approaching the worksite.

   Authorising Signaller
9. Once the Protection Officer has confirmed the assurances, re-establish the ASB and provide the protection number.

   Protection Officer
10. Before entering the Danger Zone, make sure that:
    - the ASB is re-established
    - the protection number is confirmed or if required record the new protection number
    - if used, ESML/EOL keys have been removed.

Ending ASB

Protection Officer

1. If used:
   - remove point clips
   - restore the ESML/EOL keys.

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2. Tell the Signaller:
   - your name, worksite location and protection number
   - that workers and equipment are clear of the Danger Zone
   - that, if used:
     - ESML/EOL keys have been restored
     - points that were secured are available for use.

   Signaller
3. Before ending ASB, confirm with the Protection Officer:
   - their name
   - the worksite location
   - the protection number
   - that workers and equipment are clear of the Danger Zone
   - that, if used:
     - ESML/EOL keys have been restored
     - points that were secured are available for use.

Keeping Records

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

Network Procedures

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*

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Effective date

24 March 2019