

# **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, and
  - your contact details, and
  - your Safeworking designation, and
  - the type of work, and
  - the intended duration.
- 2. Identify the line name and nominate the worksite location as being:
  - completely within a nominated dead end siding, or
  - completely within the limits of a platform, or
  - between any two of the following locations:
    - a signal
    - a platform
    - a set of points.

Signals and points must be identified by their numbers, and platforms must be identified by the station name and platform number.

3. Ask the Signaller to protect all points of entry into the affected portion of track by applying blocking facilities to exclude rail traffic.



## **Using Absolute Signal Blocking**

#### Signaller

- 4. Confirm the ASB details including the:
  - Protection Officer's name and contact details
  - type of work, and
  - duration of work, and
  - line name, and
  - 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.



# **Using Absolute Signal Blocking**

#### **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, and
  - authorise ASB, and
  - issue the ASB number.

#### **Protection Officer**

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

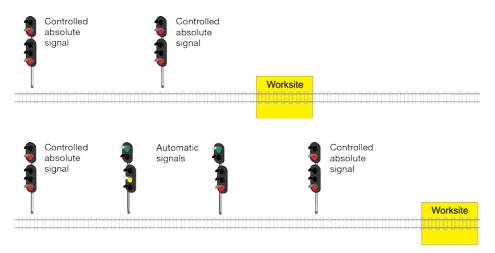




# **Using Absolute Signal Blocking**

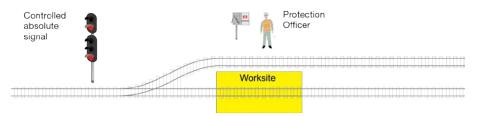
## **Types of ASB protection**

## Two consecutive controlled absolute signals at STOP

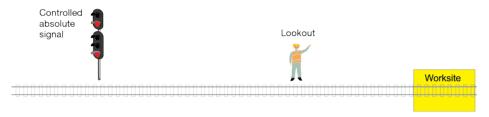


**FIGURE 1:** Example of protection arrangements using two consecutive controlled absolute signals.

#### 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

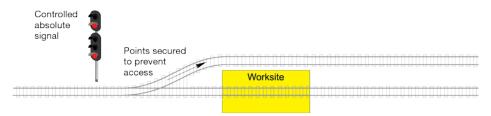


# **Using Absolute Signal Blocking**



#### **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

- Before temporarily suspending the ASB, confirm with the Protection Officer:
  - their name
  - the worksite location
  - the ASB 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.



## **Using Absolute Signal Blocking**

## **Re-establishing ASB**

#### Protection Officer

- 2. Ask the Signaller to re-establish ASB.
- Provide the worksite location and if required the ASB 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
  - ASB 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.



## **Using Absolute Signal Blocking**

#### Protection Officer

- 8. Confirm with Signaller:
  - that blocking facilities have been applied
  - that the affected portion of track is 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, reestablish the ASB and provide the ASB number.

#### **Protection Officer**

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

### **Ending ASB**

#### Protection Officer

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



## **Using Absolute Signal Blocking**

- 2. Tell the Signaller:
  - your name, worksite location and ASB 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 ASB 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 711 Using Lookouts

NPR 712 Protecting work from rail traffic on adjacent lines

NPR 751 Calculating Minimum Warning Time

### **Effective date**

29 April 2017