

# Network Safeworking Rules and Procedures

## Overrun of Limit of Authority

Rule Number: 6001



**Brookfield**  
Rail

# Overrun of Limit of Authority

Rule Number: 6001

## Document Control Identification

Document title	Number	Version	Date
6001 – Overrun of Limit of Authority		1.0	31 March 2016

## Document History

Publication version	Effective date	Page(s) affected	Reasons for and extent of change(s)
6001 – Overrun of Limit of Authority	4 May 2016		

## Authorisation



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31 March 2016



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# Table of Contents

Glossary for this Rule.....	4
1. Purpose .....	5
2. General .....	5
3. Responding to Overrun of Limit of Authority .....	5
3.1 Rail Traffic Crew Responsibilities .....	5
3.2 Network Controller Responsibilities .....	6
3.3 Authority for Movement to Continue.....	6
3.3.1 Authorising movement to continue beyond a Departure Signal .....	6
4. References .....	7
5. Effective Date .....	7

# Glossary for this Rule

<i>Authority</i>	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
<i>Brookfield Rail</i>	Brookfield Rail Pty. Ltd.
<i>Clear</i>	<p>A proceed indication displayed by a signal.</p> <p>In reference to a track circuit, block, section or signal route, the absence of rail traffic.</p> <p>In reference to track workers being clear of track.</p>
<i>Departure Signal</i>	A Controlled Absolute signal controlling the entrance to a Single line section in CTC territory.
<i>Emergency</i>	Incident requiring urgent action. The incident might involve death or serious injury, health or safety effects, significant damage to property or infrastructure.
<i>Limit of Authority</i>	<p>The limit may be defined by a sign, a signal capable of displaying a STOP indication, or a specific kilometrage point on a line.</p> <p>It defines the location to which rail traffic may travel under a Proceed Authority or the limits of a work on track authority.</p>
<i>Network</i>	A combination of track and other associated infrastructure controlled by Brookfield Rail.
<i>Network Controller</i>	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
<i>Occupancy Authority</i>	A formal authority that allows occupancy of a portion of line by rail traffic or for work on track.
<i>Operator's Representative</i>	A person authorised by an above rail or below rail Operator to act on their behalf.
<i>Protection Officer</i>	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
<i>Rail Traffic</i>	Trains and track vehicle or vehicles travelling on the Network.
<i>Rail Traffic Crew</i>	Competent Workers responsible for the operation of the Motive Power Unit.
<i>Section</i>	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
<i>Set Back</i>	To move in the reverse direction to that provided in the current Proceed Authority.
<i>Station</i>	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.

# 1. Purpose

The purpose of this Rule is to provide instruction on how *Rail Traffic* is managed when an overrun of its *Limit of Authority* has occurred in the *Network*.

# 2. General

An overrun of *Limit of Authority* occurs when *Rail Traffic*, without authority:

- passes a signal at STOP;
- passes a sign that shows a *Limit of Authority*;
- exceeds the limit of an *Occupancy Authority*; or
- enters a block without the correct authority.

# 3. Responding to Overrun of Limit of Authority

## 3.1 Rail Traffic Crew Responsibilities

*Rail Traffic Crews* that have overrun a *Limit of Authority* must immediately:

- stop their *Rail Traffic*;
- broadcast an *Emergency* radio call, where the *Rail Traffic Crew* believe there is immediate danger;
- take action to prevent a collision with other *Rail Traffic*; and
- tell the *Network Controller*.

## 3.2 Network Controller Responsibilities

The *Network Controller* must:

- arrange to stop *Rail Traffic* that has overrun its *Limit of Authority* and has not stopped;
- arrange to stop other *Rail Traffic* movements that are at risk;
- tell *Protection Officers* at affected worksites;
- tell affected *Rail Traffic Crew* to wait for further instructions;
- determine the method of working to be used to clear *Rail Traffic*;
- tell the *Brookfield Rail* Network Rail Operations Manager about the overrun of authority;
- tell the affected *Operator's Representative* about the overrun of *Limit of Authority*, and
- tell other affected *Network Controllers*.

## 3.3 Authority for Movement to Continue



**WARNING:** Where an overrun of the *Limit of Authority* occurs at a *Departure Signal*, the *Rail Traffic* must be *Set Back* in accordance with Rule 4015 Setting Back or Propelling on Running Lines.

Where an overrun of the *Limit of Authority* occurs due to:

- a control system fault, the *Network Controller* may authorise the *Rail Traffic* movement to continue for signals other than a *Departure Signal*.
- *Rail Traffic Crew* error, the *Brookfield Rail* Manager Network Operations approval must be given for the *Rail Traffic* movement to continue.

### 3.3.1 Authorising movement to continue beyond a Departure Signal

Where an overrun of the *Limit of Authority* occurs due to a control system fault at a *Departure Signal* the *Brookfield Rail's* Manager Network Operations may authorise the *Network Controller* to allow the *Rail Traffic* to continue without *Setting Back* provided:

- the signal was at PROCEED, indicating the first *Track Section* was *Clear*, and
- any opposing *Rail Traffic* at or approaching the *Station* in advance has been advised.

## 4. References

4015 Setting Back or Propelling on Running Lines

## 5. Effective Date

4 May 2016



# Network Safeworking Rules and Procedures

## Blocking Facilities

Rule Number: 6003



**Brookfield**  
Rail



# Blocking Facilities

Rule Number: 6003

## Document Control Identification

Document title	Number	Version	Date
6003 – Blocking Facilities		1.0	31 March 2016

## Document History

Publication version	Effective date	Page(s) affected	Reasons for and extent of change(s)
6003 – Blocking Facilities	4 May 2016		

## Authorisation



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31 March 2016



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# Table of Contents

Glossary for this Rule.....	4
1. Purpose .....	5
2. General .....	5
3. Management of Blocking Facilities.....	6
3.1 Temporary Removal.....	6
3.2 Permanent Removal.....	6
4. Keeping Records.....	6
5. References .....	6
6. Effective Date .....	6

# Glossary for this Rule

<i>Blocking Facility</i>	A facility used by a Network Controller to prevent either the unintended issue of an Occupancy Authority, or the operation of points or signalling equipment.
<i>Clear</i>	<p>A proceed indication displayed by a signal.</p> <p>In reference to a track circuit, block, section or signal route, the absence of rail traffic.</p> <p>In reference to track workers being clear of track.</p>
<i>Competent Worker</i>	A worker certified as competent to carry out a relevant task.
<i>Issue</i>	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
<i>Network Control Diagram</i>	A diagram used by Network Controllers showing operational information for a Rail Traffic control area to create a permanent record, also known as a Network Control graph.
<i>Network Controller</i>	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
<i>Occupancy Authority</i>	A formal authority that allows occupancy of a portion of line by rail traffic or for work on track.
<i>Permanent Record</i>	A record made in writing or in an electronic system, and kept for reference and audit.
<i>Points</i>	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
<i>Route</i>	The rail traffic path from one limit of authority to the next in the direction of travel.
<i>Section</i>	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
<i>Signalling Equipment</i>	Signalling equipment and telecommunications equipment used as part of the safeworking and operating systems of the Network.
<i>Track</i>	The combination of rails, rail connectors, sleepers, ballast, points and crossings.

# 1. Purpose

The purpose of this Rule is to detail the protocols for using *Blocking Facilities*. These devices are used to prevent the unintended *Issue* of *Occupancy Authorities* or the operations of *Signalling* or *Point Equipment*.

# 2. General



**WARNING:** Unless assured by the *Network Controller*, *Competent Workers* must not assume that:

- **signals have been set at STOP;**
- ***Points* have been correctly set; or**
- ***Blocking Facilities* have been applied.**

Unless otherwise permitted in the Rules:

- equipment with *Blocking Facilities* applied must not be operated; and
- *Network Controllers* must not Issue *Occupancy Authorities* for Sections that are shown as blocked out of use on *Network Control Diagrams*.

## 3. Management of Blocking Facilities

Before applying *Blocking Facilities* to signals, *Points* or *Sections of Track*, *Network Controllers* must make sure that any affected *Points* are set in the correct position.

### 3.1 Temporary Removal

*Blocking Facilities* may be temporarily removed from controls, with the approval of the person who requested the application of the blocking, in order to:

- set a different *Route* using the same controls;
- after safe arrangements have been made, *Clear* a signal to permit a movement over the blocked *Route*; or
- maintain and test the *Signalling Equipment*.

*Network Controllers* must restore *Blocking Facilities* to controls as soon as the activity that required their temporary removal has been completed, and confirm that the *Blocking Facilities* have been re-applied with the person who requested the blocking.

### 3.2 Permanent Removal

*Blocking Facilities* must be removed from controls when the conditions that required their application no longer exist and with the approval of the person who requested the blocking.

## 4. Keeping Records

*Network Controllers* and the person requesting the blocking must make a *Permanent Record* of the application and removal of *Blocking Facilities*.

## 5. References

Nil

## 6. Effective Date

4 May 2016



# Network Safeworking Rules and Procedures

## Fixed Signals

Rule Number: 6005



# Fixed Signals

Rule Number: 6005

## Document Control Identification

Document title	Number	Version	Date
6005 – Fixed Signals		1.0	31 March 2016

## Document History

Publication version	Effective date	Page(s) affected	Reasons for and extent of change(s)
6005 – Fixed signals	4 May 2016		

## Authorisation



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# Table of Contents

Glossary for this Rule.....	4
1. Purpose .....	7
2. General .....	7
3. Indications of Fixed Signals .....	8
3.1 STOP .....	8
3.2 PROCEED .....	8
4. Types of Fixed Signals.....	9
4.1 Running Signals.....	9
4.2 Controlled Absolute Signals .....	9
4.2.1 Departure Signals.....	9
4.3 Absolute Signals .....	10
4.3.1 Intermediate Signals .....	10
4.3.2 Approach Signals.....	10
4.4 Shunting Signals .....	11
5. Changing Signal Indications .....	11
5.1 Responding to a Condition Affecting the Network.....	11
6. Irregular Signal Indications.....	12
7. Out of Service or Non-Commissioned Signals.....	13
8. Testing Signals .....	14
9. Signal Indications and their Meanings.....	15
10. Three Colour Light Signalling Operation .....	18
11. Repeater Signals.....	19
12. References .....	19
13. Effective Date.....	19

# Glossary for this Rule

<i>Absolute Signal</i>	An automatic fixed signal that is controlled by the passage of Rail Traffic (i.e. they are not operated by a Network Controller) and must not be passed at STOP without the authority of the Network Controller.
<i>Active Control Level Crossing</i>	A road or pedestrian level crossing where warning equipment warns road users and pedestrians about approaching rail traffic by devices such as flashing lights or barriers.
<i>Adjacent</i>	Near to, close to, parallel to.
<i>Aspect</i>	The displayed pattern or position of lights used to give a signal indication.
<i>Authority</i>	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
<i>Automatic Signalling Territory</i>	See Centralised Traffic Control (CTC)
<i>Blocking Facility</i>	A facility used by a Network Controller to prevent either the unintended issue of an Occupancy Authority, or the operation of points or signalling equipment.
<i>Catch Points</i>	Single or double bladed points used to derail rail traffic that might enter or foul an adjacent running line.
<i>Centralised Traffic Control (CTC) Territory</i>	The portions of line where the Centralised Traffic Control system of Safeworking is used.
<i>Centralised Traffic Control (CTC)</i>	A system where points and signals at a number of locations are remotely controlled from a centralised control room or other locations along the route.
<i>Certified</i>	Infrastructure or rolling stock that is fit for purpose.
<i>Clear</i>	<p>A proceed indication displayed by a signal.</p> <p>In reference to a track circuit, block, section or signal route, the absence of rail traffic.</p> <p>In reference to track workers being clear of track.</p>
<i>Competent Worker</i>	A worker certified as competent to carry out a relevant task.
<i>Condition Affecting the Network (CAN)</i>	A situation or condition that affects or has potential to affect the safety of the Network.
<i>Controlled Absolute Signal</i>	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
<i>Controlled Location</i>	A location where a Network Controller controls the signalling and Safeworking operations remotely.
<i>Departure Signal</i>	A Controlled Absolute signal controlling the entrance to a Single line section in CTC territory.

<i>Derail Device</i>	A device intended to guide the wheels of rail traffic off the rails to protect a running line.
<i>Fixed Signal</i>	A signal that is located permanently near the line.
<i>Intermediate Signal</i>	An intermediate signal is an automatic fixed signal (absolute signal) used to divide a section to facilitate the movement of following rail traffic.
<i>Issue</i>	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
<i>Location</i>	A place in the Network with a designated name, identification number, or signalling reference.
<i>Network Controller</i>	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
<i>Normal Speed</i>	A speed that does not exceed the speed limit currently in effect for the location and type of rail traffic.
<i>Occupancy</i>	Presence of rail traffic or track workers on track.
<i>Permanent Record</i>	A record made in writing or in an electronic system, and kept for reference and audit.
<i>Points</i>	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
<i>Propel</i>	To push rail traffic away from the controlling locomotive or motive power unit.
<i>Rail Traffic</i>	Trains and track vehicle or vehicles travelling on the network.
<i>Rail Traffic Crew</i>	Competent Workers responsible for the operation of the Motive Power Unit.
<i>Restraint Authority</i>	The Restraint Authority directs rail traffic not to depart the location irrespective of any available Proceed Authority.
<i>Restricted Speed</i>	Restricted speed is a speed that allows rail traffic to stop short of an obstruction within half the distance of clear track that is visible ahead.  Restricted speed must not exceed 25 km/h.
<i>Route</i>	The rail traffic path from one limit of authority to the next in the direction of travel.
<i>Running Signal</i>	A fixed signal placed near a running line to authorise and control running movements.



<i>Section</i>	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
<i>Shunt</i>	To move rail traffic, rakes of vehicles, or vehicles on lines for purposes other than through movement.
<i>Signals Maintenance Representative</i>	A qualified and authorised signals maintenance worker.
<i>Single Line Working</i>	Rail traffic working in both directions over a single line where multiple line unidirectional operation normally applies.
<i>Track</i>	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
<i>Train</i>	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
<i>Travel</i>	Planned or purposeful movement from one location to another.

# 1. Purpose

The purpose of this Rule is to outline the protocols for using *Fixed Signals* to authorise and regulate the movement of *Rail Traffic*.

# 2. General

*Fixed Signals* are used to:

- separate and regulate *Rail Traffic*;
- indicate to *Rail Traffic Crews* and other *Competent Workers* the status of the line ahead; and
- show which *Route* is set.

*Rail Traffic Crews* and *Competent Workers* directing *Shunting* and *Propelling* movements must obey the indications and instructions displayed by signals.

*Fixed Signals* must be located:

- where they enable *Rail Traffic Crews* to see and respond in sufficient time, in order to safely control *Rail Traffic* movements;
- where they provide a sufficient safe overlap; and
- as far as is practicable:
  - on the left hand side *Adjacent* to; or
  - directly over the *Track* to which they apply.



**NOTE:** Only in circumstances where it is not safe, or not practical, to place signals on the left hand side or above the *Track* to which they apply, the signals may be placed on the right hand side.

*Fixed Signal* indications are displayed by coloured lights.

*Fixed Signals* may be fitted with marker plates for identification

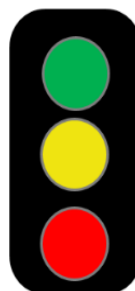
## 3. Indications of Fixed Signals

The indications of *Fixed Signals* are:

**CLEAR** indicated by a green light

**CAUTION** indicated by a yellow light

**STOP** indicated by a red light



CAUTION and CLEAR are PROCEED Aspects and give the *Rail Traffic Crew* the authority to Proceed.

### 3.1 STOP

*Rail Traffic* must stop before a signal displaying a STOP Aspect.

Signals may be passed at STOP only in accordance with Rule 6013 Passing Fixed Signals at STOP.

### 3.2 PROCEED

A PROCEED Aspect shows that:

- interlocked *Points* protected by the signal are set in the correct position for the movement;
- no conflicting *Route* has been set; and
- where interlocked, *Active Control Level Crossing* equipment is operational.

A PROCEED Aspect by a *Running Signal* and a CLEAR Aspect on a *Shunt* signal shows that the block ahead is unoccupied.

A CAUTION Aspect by a *Shunting* signal does **not** indicate that the block ahead is unoccupied.



**NOTE:** PROCEED Aspects on signals prove *Route integrity*.

## 4. Types of Fixed Signals

*Fixed Signals* are of two types:

- *Running*, and
- *Shunting*.

### 4.1 Running Signals

There are two categories of *Running Signals*:

- *Controlled Absolute*; and
- *Absolute*.

### 4.2 Controlled Absolute Signals



**WARNING: *Absolute Signals* must not be passed at STOP without the authority of the *Network Controller*.**

A *Controlled Absolute Signal* is:

- Controlled by the *Network Controller* and the passage of *Rail Traffic*; and
- identified by a white reflectorised marker plate located on the centre of the mast, or more than one signal on the same mast, showing a signal number as shown on the diagram of signalling.

The normal indication of a *Controlled Absolute Signal* is STOP; A *Controlled Absolute Signal* must be maintained at STOP until it is necessary to place it to PROCEED.

#### 4.2.1 Departure Signals

*Departure Signals* are placed at the entrance to all single line block *Sections* in *Automatic Signalling Territory* to facilitate *Single Line Working*, and to prevent *Rail Traffic* from meeting head on in a *Section*.

*Departure Signals* at each end of a single line *Automatic Signalling Section* work in conjunction with each other to ensure only one *Departure Signal* can display a PROCEED Aspect at the same time. The opposing *Departure Signal* will not show a PROCEED Aspect until *Rail Traffic* has passed out of the *Section*.

## 4.3 Absolute Signals

### 4.3.1 Intermediate Signals

An *Intermediate Signal* is used to divide the *Section* between *Controlled Locations* to facilitate the movement of following *Rail Traffic* and is:

- controlled only by the passage of *Rail Traffic*; and
- identified by a square white reflectorised marker plate located diagonally below and to the right of the signal head. It displays the signal number based on the kilometreage preceded by the letter "D" for down signal and "U" for up signal.

The normal indication of an *Intermediate Signal* is Proceed (Caution or Clear).

### 4.3.2 Approach Signals

Approach Signals are *Absolute Signals* that do not divide the *Section*.

Approach Signals are identified by a triangular white reflectorised marker plate located diagonally below and to the right of the signal head and displays the signal number based on the kilometreage preceded by the letter "D" for Down signal and "U" for Up signal.

The purpose of Approach signals is to provide an indication to *Rail Traffic Crews* that they are approaching a *Controlled Location*.



**NOTE:** Not all *Controlled Locations* have Approach Signals.



## 4.4 Shunting Signals



**WARNING:** A *Shunting* signal must not be used as the authority for *Rail Traffic* to pass through a *Section*.

A *Shunting* Signal authorises a movement at *Restricted Speed* past that signal.



**WARNING:** *Shunting* signals can be *Cleared* if the line beyond the signal is occupied. *Rail Traffic Crews* must Proceed as if the line is *Occupied*.

A PROCEED Aspect by a *Shunting* signal is an authority to Proceed up to, and not beyond, the first of the following limits reached:

- as far as the line ahead is *Clear*;
- a Limit of *Shunt* sign;
- a set of non-interlocked *Points*;
- an indicator showing that *Points* are not set;
- open *Catch Points*;
- a *Derailing Device* on the rail;
- a signal for the direction of *Travel*; or
- a shorter distance defined by the *Network Controller*.

## 5. Changing Signal Indications

Under normal conditions, if *Rail Traffic* is standing at or approaching a signal, the *Network Controller* must not change the indication of that signal to a more restrictive Aspect unless the *Rail Traffic Crew*:

- has been told; and
- is able to respond to the altered indication.

### 5.1 Responding to a Condition Affecting the Network

If there is a *Condition Affecting the Network (CAN)* and *Rail Traffic* is standing at or *Closely Approaching* a signal, the *Network Controller* may change the indication of the signal to a more restrictive Aspect.

The *Network Controller* must tell the *Rail Traffic Crew* about the altered signal Aspect:

- prior to altering the signal; or
- as soon as possible after altering the signal.

## 6. Irregular Signal Indications

A *Fixed Signal* indication must be treated as STOP if:

- it is an illegal signal indication;
- there is no indication;
- there is no indication other than the Junction indicator; or
- it is not understood.

*Competent Workers* must report irregular signal indications to the *Network Controller*.

The *Network Controller* must tell a *Signals Maintenance Representative* about irregular signal indications.

The *Network Controller* must set affected controlled signals to STOP with *Blocking Facilities* applied, and if the signals do not display a STOP indication, *Issue* the *Rail Traffic* with a *Restraint Authority*.

The *Network Controller* must then authorise signals to be passed at STOP only in accordance with Rule 6013 Passing Fixed Signals at STOP.

If *Absolute Signals* maintain a STOP indication, these signals may be passed at STOP only in accordance with Rule 6013 Passing Fixed Signals at STOP.

If affected *Absolute Signals* maintain a *Clear* indication, the *Network Controller* must implement Rule 5023 Manual Block Working.

Affected signals must not be used to provide PROCEED indications before they have been *Certified* back into use.

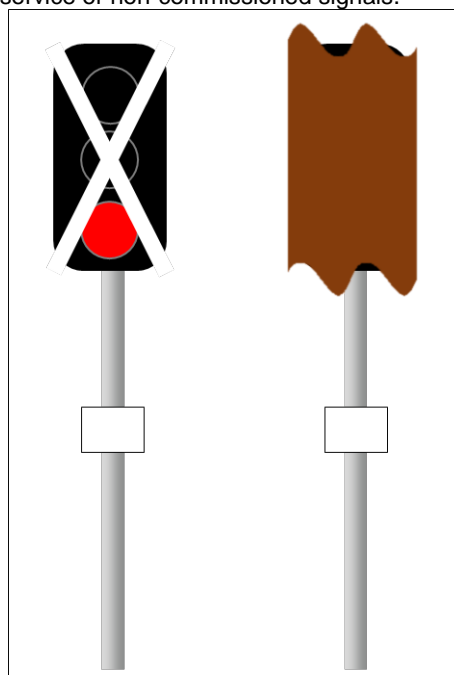
## 7. Out of Service or Non-Commissioned Signals

Signals may be put in place prior to commissioning, or may remain in place after being taken out of service.

These are identified by:

- an obscuring cover over the signal;
- a white cross affixed to the front of the signal; or
- where next to a functioning signal, having the signal head covered or turned away from the line.

Figure 6005-1 Examples of out of service or non-commissioned signals.



## 8. Testing Signals

A signal must not be tested if:


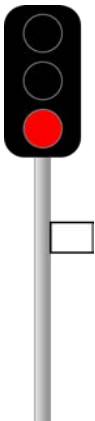



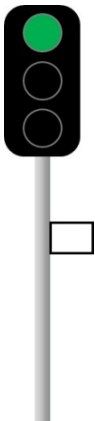
- *Rail Traffic* is *Closely Approaching*; and
- the testing could change the signal indication.

If *Rail Traffic* is standing at a signal at STOP, the *Network Controller* must:


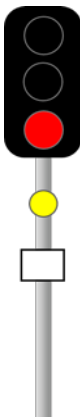
- before testing the signal, tell the *Rail Traffic Crew* that signal testing is about to commence, and that their *Rail Traffic* must not move unless instructed to do so; and
- after testing the signal, tell the *Rail Traffic Crew* that the testing has been completed, and if required, give an *Authority to Proceed*.

The *Network Controller* and *Competent Worker* must make a *Permanent Record* of the signal test.

## 9. Signal Indications and their Meanings



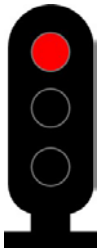


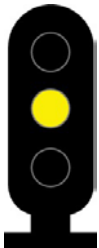


Signal			
Controlled Absolute	Absolute	Meaning	Required Action
		The block ahead of the signal is <i>Occupied</i> or for any reason that the <i>Rail Traffic</i> has to be stopped.	<i>Rail Traffic</i> must be stopped before reaching the signal.
		The block ahead of the signal is <i>Clear</i> but the next signal is at STOP.	<i>Rail Traffic</i> is to Proceed at <i>Normal Speed</i> for the <i>Section</i> but be prepared to stop at the next signal.
		The block ahead of the signal is <i>Clear</i> and the next signal is either at CAUTION or <i>CLEAR</i> .	<i>Rail Traffic</i> is to Proceed at <i>Normal Speed</i> for the <i>Section</i> .



Signal	Type of Signal	Meaning	Action Required
	<i>Controlled Absolute Signal with a Single Aspect Shunt signal on the same mast.</i>	The block ahead of the signal is <i>Occupied</i> or for any reason the <i>Rail Traffic</i> has to be stopped.	<i>Rail Traffic</i> must be stopped before reaching the signal
	<i>Controlled Absolute Signal with a Single Aspect Shunt signal on the same mast set at Proceed.</i>	The <i>Route</i> is set but the block ahead of the signal may be <i>Occupied</i> and movements are to be at <i>Restricted Speed</i> .	<i>Rail Traffic</i> is to Proceed with caution but be prepared to stop short of any obstruction.

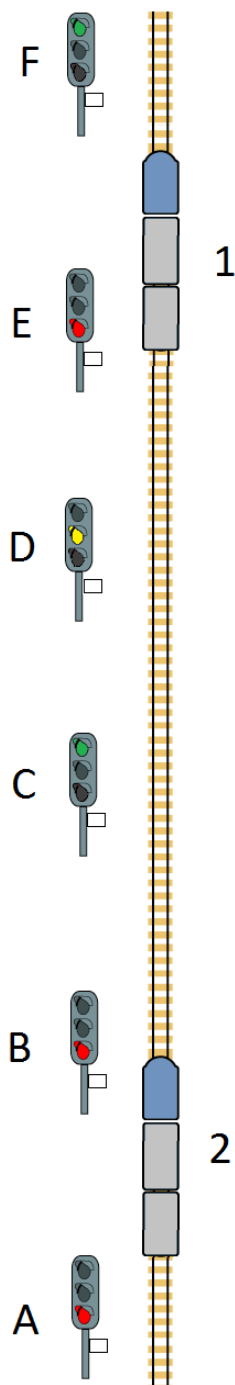


**NOTE:** At some *Locations*, *Running Signals* will be at a reduced height due to there being insufficient room to fit a signal at its normal height.

Ground Shunt Signals				
Single Aspect	Two Aspect	Three Aspect	Meaning	Action Required
			The <i>Route</i> for the signal is not set.	<i>Rail Traffic</i> must be stopped before reaching the signal
			The <i>Points</i> are set correctly for the <i>Route</i> .	<i>Rail Traffic</i> is to Proceed at <i>Restricted Speed</i> but be prepared to stop short of any obstruction
	Not applicable		The <i>Points</i> are set correctly and the line is <i>Clear</i> to the next signal, which is showing caution, or <i>Clear</i> .	<i>Rail Traffic</i> is to Proceed to the next signal, which is showing caution, or <i>Clear</i> .

# 10. Three Colour Light Signalling Operation

This diagram represents a series of blocks and how the signals operate as *Trains* move along the *Track*



Signal F displays a “Clear” (green) *Aspect* as there is no *Train* in the block in advance of the signal.

*Train* No. 1 will hold Signal E at “STOP” until it has passed *Clear* of the overlap *Track* of signal F.

Signal D displays a “Caution” (yellow) *Aspect* indicating that the next signal, signal E is at STOP.

Signal C displays a “Clear” (green) *Aspect* indicating that the next signal is displaying a “Proceed” *Aspect*.

Signal B displays a “STOP” *Aspect* as *Train* No. 2 is passing the signal.

Signal A will remain at “STOP” until *Train* No. 2 has cleared the overlap passed signal B.

# 11. Repeater Signals

Repeater signals are provided to give *Rail Traffic Crew* advanced information of the indications of the main *Fixed Signal*.

Repeaters are used where the *Fixed Signal* that is to be repeated is located in a position where *Rail Traffic Crews* cannot respond in sufficient time to control *Rail Traffic*.

# 12. References

5023 Manual Block Working

6013 Passing Fixed Signals at STOP

# 13. Effective Date

4 May 2016

# Network Safeworking Rules and Procedures

## Signs

Rule Number: 6007



# Signs

Rule Number: 6007

## Document Control Identification

Document title	Number	Version	Date
6007 - Signs		1.0	31 March 2016
		1.01	01 October 2016

## Document History

Publication version	Effective date	Page(s) affected	Reasons for and extent of change(s)
6007 - Signs	4 May 2016	10	Initial Issue
	01 Oct 2016		Minor Review

## Authorisation



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1 October 2016



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# Table of Contents

Glossary for this Rule.....	4
1. Purpose .....	7
2. General .....	7
2.1 Appearance .....	7
2.2 Size .....	7
2.3 Orientation.....	8
2.4 Colour .....	8
3. Permanent Speed Restriction Signs.....	9
4. Temporary Speed Restriction Signs.....	11
5. Permanent Signs.....	12
6. Track Work Signs.....	14
7. Train Order Territory Signs .....	15
8. References .....	16
9. Effective Date .....	16

# Glossary for this Rule

<i>Adjacent</i>	Near to, close to, parallel to.
<i>Authority</i>	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
<i>Bi-Directional</i>	Normal movement of rail traffic in either direction according to the infrastructure and system of Safeworking in use.
<i>Clear</i>	<p>A proceed indication displayed by a signal.</p> <p>In reference to a track circuit, block, section or signal route, the absence of rail traffic.</p> <p>In reference to track workers being clear of track.</p>
<i>Competent Worker</i>	A worker certified as competent to carry out a relevant task.
<i>Consist</i>	A listed order of the vehicles arranged to make up a complete train.
<i>Controlled Absolute Signal</i>	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
<i>Controlled Location</i>	A location where a Network Controller controls the signalling and Safeworking operations remotely.
<i>Crossing Location/Station</i>	May consist of single or double ended portion of track, to hold rail traffic, connected to a main line that is used to permit other rail traffic to cross or pass.
<i>Departure Signal</i>	A Controlled Absolute signal controlling the entrance to a Single line section in CTC territory.
<i>Driver Information System</i>	<p>A system that can provide Rail Traffic Crews with:</p> <ul style="list-style-type: none"> <li>• Train Consist</li> <li>• Temporary Speed Restrictions</li> <li>• Permanent Speed Restrictions</li> <li>• Standard Timetable</li> <li>• Special Train Notices</li> <li>• Instructions</li> <li>• Track Warnings</li> <li>• Vehicle Restrictions</li> </ul>
<i>Facing Points</i>	Points with the switch blades facing approaching rail traffic where the track diverges.
<i>Fixed Signal</i>	A signal that is located permanently near the line.



<i>In-Field Protection</i>	One or more devices approved by Brookfield Rail that provide warning to protect rail traffic crew and workers.  The device or devices may be used in conjunction with signalling or blocking facilities.
<i>Level Crossing</i>	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
<i>Local Possession Authority (LPA)</i>	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.
<i>Location</i>	A place in the Network with a designated name, identification number, or signalling reference.
<i>Motive Power Unit</i>	A rail vehicle used to provide the power to move itself or other vehicles.
<i>Network</i>	A combination of track and other associated infrastructure controlled by Brookfield Rail.
<i>Network Controller</i>	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
<i>Normal Speed</i>	A speed that does not exceed the speed limit currently in effect for the section of line and type of rail traffic.
<i>Obstruct</i>	To make a line unsafe for the passage of rail traffic by the placing of tools, equipment or plant on the track.
<i>Protection</i>	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.
<i>Rail Traffic</i>	Trains and track vehicle or vehicles travelling on the network.
<i>Rail Traffic Crew</i>	Competent Workers responsible for the operation of the Motive Power Unit.
<i>Railway Track Signal (RTS)</i>	A device attached to a rail that explodes on impact, used to attract attention of rail traffic crews.
<i>Section</i>	The line between the departure end station limits of one location and the arrival end station limits of another location. A section consists of one or more blocks.
<i>Self-Restoring Points (SRP)</i>	Points which can be operated remotely or by push button that automatically restores to their normal position following the movement of rail traffic. (refer to Points)
<i>Station</i>	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
<i>Station Limits</i>	A defined operational limit of controlled locations or a running line.
<i>Stopping Place</i>	A designated location, next to the line, that may allow personnel to enter and leave trains.

<i>Temporary Speed Restriction (TSR)</i>	An imposed reduction of the normal speed for a portion of track.
<i>Track</i>	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
<i>Track Closed Warning Device</i>	A Brookfield Rail approved Stop sign designed to lock into the gauge as part of in-field protection.
<i>Trailing Points</i>	Points with the switch blades facing away from approaching rail traffic.
<i>Train Order</i>	An authority issued by the Network Controller for the movement of rail traffic or issue of LPA track work authorities.
<i>Train Order Territory</i>	The portions of line where the Train Order system of Safeworking is used.
<i>Travel</i>	Planned or purposeful movement from one location to another.
<i>Whistle</i>	A device such as a bell, whistle, siren, horn or hooter, fitted to rail traffic to give audible warning.

# 1. Purpose

The purpose of this Rule is to detail how signs are to be used to convey information such as safety critical instructions, advice and areas of control.

# 2. General

Signs must:

- be placed where they can be clearly seen by the intended viewer; and
- as far as is practicable, be located on the left hand side *Adjacent* to, or directly over the *Track* to which they apply.



**NOTE:** Only in circumstances where it is not safe, or not practical, to place signs on the left hand side or above the lines to which they apply, may signs be placed on the right hand side.

## 2.1 Appearance

Signs on the *Network* must be:

- reflective; and
- clearly distinguishable.



**NOTE:** Signs may be provided with a border to improve visibility or to give additional information.

## 2.2 Size

A sign must be as large as practical to allow clear sighting and interpretation by *Rail Traffic Crews Travelling at Normal Speed*.

## 2.3 Orientation

Signs must be oriented:

- horizontally wherever possible; or
- vertically, only if clearance between *Tracks*, or between *Tracks* and structures, is limited.

## 2.4 Colour

The background colour of a sign indicates its purpose.

A sign with a background that is mainly:





- red, indicates STOP.
- yellow, conveys a WARNING.
- white and blue, conveys information or advice.







**NOTE:** Warning signs in the *Network* may have a black background with yellow writing.

### 3. Permanent Speed Restriction Signs

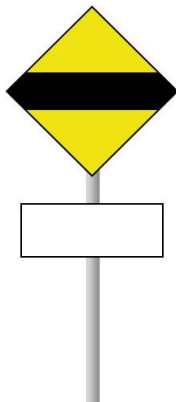
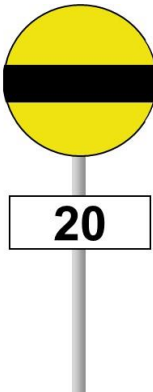

These signs are used where it is necessary for *Rail Traffic* to *Travel* at reduced speed because of *Track* geometry such as curves and gradients or when *Travelling* through an area of high signal congestion.

Sign	Name and Description	Required Action
	<b>Permanent Speed Restriction Warning sign</b> This sign is placed 500 metres before the Speed Restriction sign.	<i>Rail Traffic</i> should Proceed, being prepared to <i>Travel</i> at the speed shown on the Speed Restriction sign.
	<b>Speed Restriction sign</b> This sign is placed at the start of the Speed Restricted area.	<i>Rail Traffic</i> must Proceed at the speed shown on the Speed Restriction sign.
	<b>End of Speed Restriction sign</b> This sign is placed at the end of the area covered by the speed restriction.	<i>Rail Traffic</i> can return to the authorised <i>Track</i> speed, once the last vehicle of the <i>Rail Traffic Consist</i> , has passed beyond the End of Speed Restriction sign.
	<b>Turnout Speed Restriction sign.</b> This sign is placed at <i>Facing</i> and <i>Trailing Points</i> to indicate the turnout speed for the reverse setting.	<i>Rail Traffic</i> must Proceed at the speed shown on the turnout Speed Restriction Sign, until the <i>Rail Traffic</i> has completely cleared the area covered by the speed restriction.  Where no sign is in place the maximum speed over the reverse setting is 30 kph.

	<p><b>Level Crossing Speed Restriction sign.</b></p> <p>This sign is placed on the approach to the <i>Level Crossing</i> to indicate the approach speed.</p> <p>Used on a <i>Level Crossing</i> with restricted road user view to approaching <i>Rail Traffic</i>.</p>	<p><i>Rail Traffic</i> must Proceed at the speed shown on the Speed Restriction Sign, until the <i>Rail Traffic</i> has reached the <i>Level Crossing</i>.</p>
	<p><b>Self-Restoring Points (SRP) Speed Restriction sign.</b></p> <p>This sign is placed on the approach to <i>Self-Restoring Points (SRP)</i> in <i>Train Order Territory</i> to indicate the approach speed.</p>	<p><i>Rail Traffic</i> must Proceed at the speed shown on the Speed Restriction Sign, until the <i>Rail Traffic</i> has reached the <i>Points Track</i>.</p>
	<p><b>Speed Ramp sign.</b></p> <p>This sign is placed at the point where acceleration must commence to overcome severe gradients.</p>	<p><i>Rail Traffic</i> may need to increase to the speed shown on the Speed Ramp Sign in order to create enough momentum to travel up the severe gradient ahead, the speed increase applies only until the <i>Rail Traffic</i> has reached the speed ramp termination sign.</p>
	<p><b>Speed Ramp Termination sign.</b></p> <p>This sign is placed at the summit of the gradient.</p>	<p><i>Rail Traffic</i> must return to the authorised <i>Track</i> speed, once the <i>Rail Traffic</i> has reached the Speed Ramp Termination Sign.</p>

## 4. Temporary Speed Restriction Signs



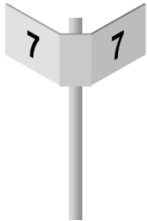

These signs are used where it is necessary for *Rail Traffic* to *Travel* at reduced speed because of *Track* maintenance work or for any other cause in accordance with Rule 3025 Temporary Speed Restrictions.






Sign	Name and Description	Required Action
	<p><b>Temporary Speed Restriction (TSR) Ahead sign.</b></p> <p>This sign is placed 2500 metres before the <i>Temporary Speed Restriction (TSR)</i> Sign.</p> <p>Placed below the <i>Temporary Speed Restriction (TSR)</i> Ahead Sign is a Speed Restriction sign displaying the maximum speed permitted for the restricted area.</p>	<p><i>Rail Traffic</i> should Proceed, being prepared to <i>Travel</i> at the speed indicated on the sign placed below the <i>Temporary Speed Restriction (TSR)</i> Ahead Sign.</p> <p><b>Note:</b> If no maximum speed is displayed below the <i>Temporary Speed Restriction (TSR)</i> Ahead Sign, <i>Rail Traffic</i> must be prepared to reduce speed to the speed detailed in the <i>Drivers Information Documentation</i>, or to 15km/h through the <i>TSR</i>.</p>
	<p><b>Temporary Speed Restriction (TSR) Start sign.</b></p> <p>This sign is placed 50 metres before the area covered by the <i>Temporary Speed Restriction (TSR)</i>.</p> <p>Placed below the <i>Temporary Speed Restriction (TSR)</i> Sign is a Speed Restriction sign displaying the maximum speed permitted for the restricted area.</p>	<p><i>Rail Traffic</i> must Proceed at the speed indicated on the sign placed below the <i>Temporary Speed Restriction (TSR)</i> Start Sign.</p> <p><b>Note:</b> If no maximum speed is displayed below the <i>Temporary Speed Restriction (TSR)</i> Start Sign, <i>Rail Traffic</i> must reduce speed, to the speed detailed in the <i>Drivers Information Documentation</i>, or to 15km/h through the <i>TSR</i>.</p>
	<p><b>Temporary Speed Restriction (TSR) End sign.</b></p> <p>This sign is placed 50 metres beyond the <i>Temporary Speed Restriction (TSR)</i> area.</p> <p><b>Note:</b> In <i>Bi-Directional</i> areas where the <i>TSR</i> applies in both directions, the back of the <i>TSR</i> start sign will indicate to <i>Rail Traffic</i> that they leaving the limits of the <i>TSR</i>.</p>	<p><i>Rail Traffic</i> can return to the authorised <i>Track</i> speed, once the <i>Rail Traffic Consist</i>, has passed beyond the End of Speed Restriction sign.</p>



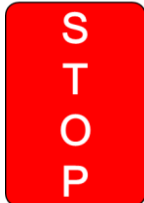

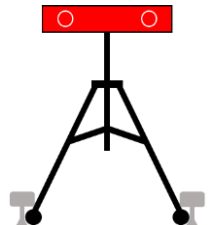

## 5. Permanent Signs

Permanent signs are placed in the *Network* to provide information and advice to *Competent Workers*.



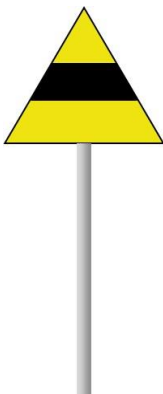
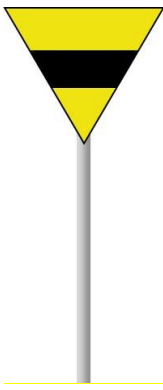
Sign	Name and Description	Required Action
	<b>Station Limits sign</b> <i>Station Limits</i> signs are used to define <i>Station Limits</i> where <i>Fixed Signals</i> are not provided.	<i>Rail Traffic Crews</i> must not Proceed beyond the <i>Station Limits</i> sign until authorised by the <i>Network Controller</i> .
	<b>Limit of Shunt sign</b> Limit of <i>Shunt</i> Signs determine the end <i>Location</i> within <i>Station Limits</i> to which <i>Shunt</i> movements may Proceed.	All <i>Rail Traffic</i> movements beyond the Limit of <i>Shunt</i> sign must be authorised with the <i>Issue</i> of an <i>Authority</i> for the <i>Section</i> ahead.
	<b>Kilometre markers.</b> This sign display's the distance from the start <i>Location</i> of the line or Junction.	
	<b>Approach to a Controlled Location Sign.</b> This sign is placed 1600 metres from the first <i>Controlled Absolute Signal</i> of a <i>Controlled Location</i> where an Approach Signal is not provided.	<i>Rail Traffic</i> should Proceed, being prepared to reduce speed or stop.

	<p><b>Predictor sign.</b> Selected <i>Level Crossings</i> are fitted with a Predictor to detect <i>Rail Traffic</i> approaching the crossing.</p>	<p><i>Rail Traffic</i> must not increase speed, above the speed they were doing at the time they passed the predictor sign, until the leading vehicle has passed over the <i>Level Crossing</i>.</p>
	<p><b>“Z” Track indicator sign.</b> “Z” <i>Tracks</i> are provided between a <i>Level Crossing</i> and a <i>Station</i> or <i>Stopping Place</i>.</p>	<p><i>Rail Traffic</i> must stand with the <i>Motive Power Unit</i> on the “Z” <i>Track</i> if stopping at the <i>Station</i>.</p>
	<p><b>Signal Location sign.</b> This sign is placed 2500 metres from a <i>Departure Signal</i> where viewing distance and signal spacing to the <i>Departure Signal</i> is restricted.</p>	<p><i>Rail Traffic</i> should Proceed, exercising caution due to restricted viewing distance.</p>
	<p><b>Whistle sign.</b> This sign is placed on the approach to <i>Level Crossings</i>.</p>	<p><i>Rail Traffic</i> must sound their <i>Motive Power Units Whistle</i> to warn of the <i>Rail Traffic's</i> approach to <i>Level Crossings</i>.</p>
	<p><b>Level Crossing and Bridge Indicator signs.</b> This sign displays the name of the <i>Level Crossing</i> or bridge the <i>Rail Traffic</i> is approaching</p>	<p><i>Rail Traffic</i> may use these as <i>Location</i> identifiers for reporting.</p>

## 6. Track Work Signs

Sign	Name and Description	Required Action
	<p><b>STOP sign.</b></p> <p>This sign is placed 500 metres before an <i>Obstruction</i> (work area) and used in conjunction with 3 <i>Railway Track Signals (RTS)</i> to provide <i>In-Field Protection</i>.</p>	<i>Rail Traffic</i> must Stop before reaching the Stop sign.
	<p><b>Stop Ahead Sign.</b></p> <p>This sign is placed 3,000 metres before an <i>Obstruction</i> (work area) and used in conjunction with 2 <i>Railway Track Signals (RTS)</i> to provide <i>In-Field Protection</i>.</p>	<i>Rail Traffic</i> should Proceed and be prepared to stop at the Stop sign.
	<p><b>Track Closed Warning Device.</b></p> <p>This device is placed on the departure side of a <i>Controlled Absolute Signal</i> or as required before an <i>Obstruction</i> (work area) to provide <i>In-Field Protection</i> in accordance with Procedure <u>9018 Using Track Closed Warning Devices</u>.</p>	<i>Rail Traffic</i> must stop before reaching the <i>Track Closed Warning Device</i> .
	<p><b>Rail Clamped STOP sign.</b></p> <p>Used in a <i>Local Possession Authority (LPA)</i> and used in conjunction with 3 <i>Railway Track Signals (RTS)</i> to provided <i>Protection</i> between separated worksites in accordance with Procedure <u>9008 Managing Multiple Worksites in a Local Possession Authority</u>.</p>	<i>Rail Traffic</i> must stop before reaching the Rail Clamped STOP sign

## 7. Train Order Territory Signs

Sign	Name and Description	Required Action
	<p><b>Commencement of Train Order Territory sign.</b></p> <p>This sign is placed at a point where <i>Train Order</i> working takes effect.</p>	<p>All rail workers are to work and operate under the Rules applicable to the <i>Train Order</i> System.</p>
	<p><b>End of Train Order Territory sign.</b></p> <p>This sign placed at the point where <i>Train Order</i> working ceases.</p>	<p>All rail workers are to work under the applicable Rules for the system of working that they are entering.</p>
	<p><b>Train Order Crossing Station Indicator sign.</b></p> <p>This sign is placed not less than 500 metres before the <i>Station Limits</i> sign, and indicates to <i>Rail Traffic</i> they are approaching a <i>Crossing Station</i> in <i>Train Order Territory</i>.</p>	<p><i>Rail Traffic</i> should Proceed, being prepared to reduce speed or stop the <i>Rail Traffic</i> based on instructions detailed on an active <i>Train Order</i>.</p>
	<p><b>Train Order Non Crossing Station Indicator sign.</b></p> <p>This sign is placed not less than 500 metres before the <i>Station Limits</i> sign, and indicates to <i>Rail Traffic</i> they are approaching a <i>Non-Crossing Station</i> in <i>Train Order Territory</i>.</p>	<p><i>Rail Traffic</i> should Proceed, being prepared to reduce speed or stop the <i>Rail Traffic</i> based on instructions detailed on an active <i>Train Order</i>.</p>

## 8. References

3025 Temporary Speed Restrictions.

9008 Managing Multiple Worksites in a Local Possession Authority.

9018 Using Track Closed Warning Devices.

## 9. Effective Date

01 October 2016

# Network Safeworking Rules and Procedures

## Indicators

Rule Number: 6009



**Brookfield**  
Rail



# Indicators

Rule Number: 6009

## Document Control Identification

Document title	Number	Version	Date
6009 – Indicators		1.0	31 March 2016

## Document History

Publication version	Effective date	Page(s) affected	Reasons for and extent of change(s)
6009 – Indicators	4 May 2016		

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# Table of Contents

Glossary for this Rule.....	4
1. Purpose .....	6
2. General .....	6
2.1 Driver's Proceed Indicators.....	6
3. Junction Indicators .....	7
4. Electrically Illuminated Points Indicator .....	8
4.1 White Light Type .....	8
4.2 Coloured Light Type.....	9
5. Mechanical Points Indicator.....	9
5.1 Round Type Points Indicator .....	9
5.2 Square Type Points Indicator.....	10
5.3 Catch Points Indicator .....	10
5.4 Cheese Knob Points .....	10
6. Driver's Proceed Indicators (DPI) .....	11
7. Passing Indicators at Unattended Train Order Crossing Stations .....	12
8. Passing Defective Indicators .....	12
9. References .....	12
10. Effective Date .....	12

# Glossary for this Rule

<i>Active Control Level Crossing</i>	A road or pedestrian level crossing where warning equipment warns road users and pedestrians about approaching rail traffic by devices such as flashing lights or barriers.
<i>Adjacent</i>	Near to, close to, parallel to.
<i>Authorised Speed</i>	The maximum permissible speed as laid down by Brookfield Rail, subject to any lesser speed shown in a Special Notice (SN), authorised electronic management system or imposed by warning and caution boards or a permanent speed board.
<i>Authority</i>	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
<i>Brookfield Rail</i>	Brookfield Rail Pty. Ltd.
<i>Catch Points</i>	Single or double bladed points used to derail rail traffic that might enter or foul an adjacent running line.
<i>Controlled Absolute Signal</i>	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
<i>Cross</i>	To cross or pass other rail traffic.
<i>Facing Points</i>	Points with the switch blades facing approaching rail traffic where the track diverges.
<i>Fixed Signal</i>	A signal that is located permanently near the line.
<i>Handsignal</i>	A signal given by hand or lights movements, hand signals may be with or without flags.
<i>Issue</i>	To provide or send copies of authorities, warnings, notices and Network publications to affected Competent Workers by voice, hand delivery or electronic means.
<i>Level Crossing</i>	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).
<i>Location</i>	A place in the Network with a designated name, identification number, or signalling reference.
<i>Main Line</i>	The running line (not including Loops) normally used for running rail traffic through and between locations
<i>Points</i>	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
<i>Points Indicator</i>	An indicator showing the position of points.
<i>Protection</i>	The means used to prevent rail traffic from entering a worksite or other portion of track, or to prevent road or pedestrian traffic entering a level crossing.

<i>Rail Traffic</i>	Trains and track vehicle or vehicles travelling on the network.
<i>Rail Traffic Crew</i>	Competent Workers responsible for the operation of the Motive Power Unit.
<i>Route</i>	The rail traffic path from one limit of authority to the next in the direction of travel.
<i>Secure</i>	To safeguard against accidental or unauthorised access or movement.
<i>Self-Restoring Points (SRP)</i>	Points which can be operated remotely or by push button that automatically restores to their normal position following the movement of rail traffic. (refer to Points)
<i>Shunt</i>	To move rail traffic, rakes of vehicles, or vehicles on lines for purposes other than through movement.
<i>Station</i>	A system of tracks within station limits at the beginning or end of a section at which rail traffic may cross, pass or run around.
<i>Trailing Points</i>	Points with the switch blades facing away from approaching rail traffic where the track converges.
<i>Train</i>	A locomotive or self-propelled vehicle, alone or coupled to one or more vehicles. Rail Traffic.
<i>Train Order</i>	An authority issued by the Network Controller for the movement of rail traffic or issue of LPA track work authorities.

# 1. Purpose

The function of this Rule is to describe the protocols for using indicators. They are provided to give *Rail Traffic Crew* information on the *Route* setting of *Points* and may be used in conjunction with *Fixed Signals*.

# 2. General



**WARNING:** Indicators do not indicate the line ahead is *clear*.

**When used in conjunction with signals, the Indicator when illuminated does not authorise the *Rail Traffic Crew* to pass a signal at Stop. The signal must show PROCEED for authority to pass.**

Where a *Fixed Signal* is not provided to govern the movement, *Rail Traffic Crews* must not proceed through the *Points* until verbally or *Handsignalled* to do so.

Indicators work in conjunction with the *Points* to which they apply, solely to indicate the way the *Points* are set.

*Points Indicators* take several forms:

- Junction indicators;
- Electrically Illuminated *Points Indicators*; and
- mechanical *Points Indicators*.

The different forms of indicators may be used in combination with each other.

## 2.1 Driver's Proceed Indicators

Driver's Proceed indicators are provided on the approach to some *Active Controlled Level Crossings* to indicate to *Rail Traffic Crews* that the *Level Crossing Protection* is active.

### 3. Junction Indicators

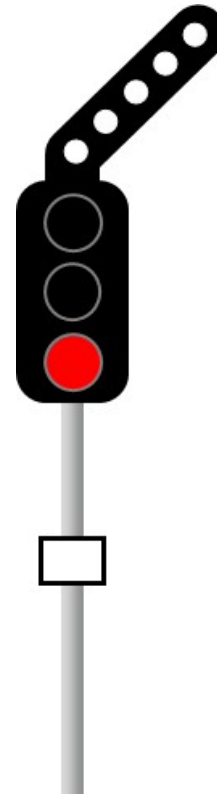
A Junction Indicator is mounted above the *Controlled Absolute Signal* with which it is associated and exhibits an indicator for each diverging *Route* in conjunction with a PROCEED indication on the signal.

A Junction Indicator may be provided with up to six arms fixed at 45 degree intervals. Diverging roads only are indicated. No indication is provided for the non-diverging line.

Each arm of the Junction Indicator contains five white lights. A minimum of three white lights must be illuminated before a PROCEED Indication can be displayed on the signal.

A Junction Indicator, when illuminated, does not authorise *Rail Traffic Crew* to pass a signal at STOP. The signal must show a PROCEED indication for authority to pass it.

Signals with Junction Indicators attached can only be passed at STOP in accordance with Rule 6013 Passing Fixed Signals at STOP.



## 4. Electrically Illuminated Points Indicator

An electrically illuminated *Points Indicator* is located *Adjacent* to and works in conjunction with, the electric point motor attached to *Self-Restoring Points*.

The operations of *Self-Restoring Points* are detailed in Procedure 9022 Operation of Self Restoring Points.

The indicator:-

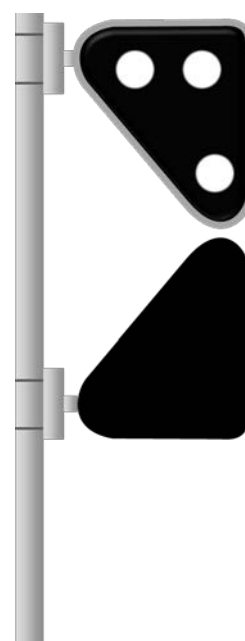
- consists of two triangular shaped indicators mounted one above the other on a single mast:
  - the upper indicator applies to *Rail Traffic* approaching in the *Facing* direction; and
  - the lower indicator applies to *Rail Traffic* approaching in the *Trailing* direction.
- has a matt black finish on both sides with a strip of white reflectorised tape surrounding the outline of the indicator and contains three lights as an indication to approaching *Rail Traffic*.

### 4.1 White Light Type

Only two white lights will be visible at any one time on each indicator and, for an approaching *Rail Traffic Crew*, will indicate that:

- when there are two lights in a vertical position, that the *Points* are set and locked for the normal setting.
- when there are two lights at a 45°, the *Points* are set and locked for the reverse setting.
- if only one light or no lights are visible *Rail Traffic* must not pass over the *Points* until they have been examined by the *Rail Traffic Crew*. The *Rail Traffic Crew* in this instance must ensure the *Points* are correctly set for the safe passage of the *Rail Traffic*.

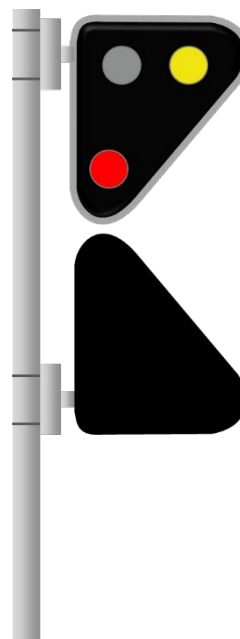
The indicator lights may be approach lit when a *Train* is within approximately 400 metres of the *Station*.



## 4.2 Coloured Light Type

Only one light will be visible at any one time on each indicator and, for an approaching *Rail Traffic Crew*, will indicate:

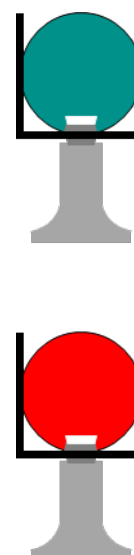
- when there is a white light, that the *Points* are set and locked for the normal setting.
- when there is a yellow light, that the *Points* are set and locked for the reverse setting.
- when there is a red light, that the *Points* are out of correspondence and not set, *Rail Traffic* must not pass over the *Points* until they have been examined by the *Rail Traffic Crew*. The *Rail Traffic Crew* in this instance must ensure the *Points* are correctly set for the safe passage of the *Rail Traffic*.



# 5. Mechanical Points Indicator

## 5.1 Round Type Points Indicator

Round type *Point Indicators*, attached to *Main Line Points* in *Train Order Territory*, have a round reflectorised green target when set in the normal *Main Line* position and a round reflectorised red target when set in the reverse position.



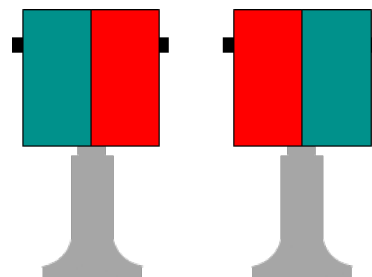


## 5.2 Square Type Points Indicator

Square type *Point Indicators* have a square half red and half green reflectorised target.

The green is exhibited in the direction for which the *Points* are set.

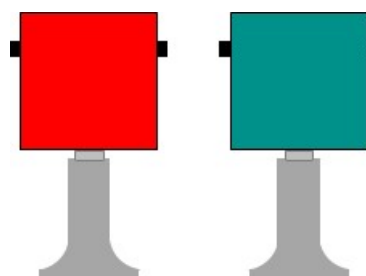
These indicators are usually found in *Station* yards and at Junctions.



## 5.3 Catch Points Indicator

*Catch Point Indicators* have a square red reflectorised target when in the normal derail position and a square green reflectorised target when reversed to the running position.

These indicators are found in *Station* yards attached to *Catch Points*.



## 5.4 Cheese Knob Points

Cheese knob *Points* are painted:

- white on one side to indicate *Points* are set to the right; and
- black on the other side to indicate the *Points* are set to the left.



## 6. Driver's Proceed Indicators (DPI)

Operations of DPIs are included in the Local Instructions for the *Location* concerned, Local instructions are detailed in *Brookfield Rail's*:

- Rail Access Management System;
- Intranet site "The Depot"; and
- Internet site [www.brookfieldrail.com](http://www.brookfieldrail.com).

Driver's Proceed indicators use white, yellow and red lights to indicate the status of *Active Control Level Crossing Protection* equipment



## 7. Passing Indicators at Unattended Train Order Crossing Stations

*Rail Traffic Crews* must not proceed through the *Points* until verbally or hand signalled to do so.

If no *Crossing*, passing or *Shunting* is to take place, the *Rail Traffic* shall enter the *Station* on the *Main Line*, or as directed on the *Train Order*, and a verbal or hand signal is not required.

Where the *Rail Traffic* is not required to stop for the *Issue* of a further *Train Order* or for any other reason, the *Rail Traffic Crew* shall proceed at *Authorised Speed*.

## 8. Passing Defective Indicators

*Rail Traffic Crews* must not pass mechanical or Electrically Illuminated *Points Indicators* that display no indication or display an illegal indication until:

- the *Points* have been checked and set for the *Route*; and
- if necessary, the *Points* have been *Secured*.

If the DPLs are not working correctly, *Rail Traffic Crews* must act in accordance with Rule 2015 Active Control Level Crossing Management.

## 9. References

2015 Active Control Level Crossing Management.

6013 Passing Fixed Signals at STOP.

9022 Operation of Self Restoring Points.

## 10. Effective Date

4 May 2016

# Network Safeworking Rules and Procedures

## Passing Fixed Signals at Stop

Rule Number: 6013



# Passing Fixed Signals at Stop

Rule Number: 6013

## Document Control Identification

Document title	Number	Version	Date
6013 – Passing Fixed Signals at Stop		1.0	31 March 2016

## Document History

Publication version	Effective date	Page(s) affected	Reasons for and extent of change(s)
6013 – Passing Fixed Signals at Stop	1 April 2017	7	Review & Update

## Authorisation



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1 April 2017



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# Table of Contents

<b>Glossary for this Rule.....</b>	<b>4</b>
<b>1. Purpose.....</b>	<b>7</b>
<b>2. General.....</b>	<b>7</b>
2.1. Controlled Absolute Departure Signal.....	7
2.2. Changing Over of Locomotives.....	8
<b>3. Stopped at a Fixed Signal .....</b>	<b>8</b>
<b>4. Condition of the Block Ahead .....</b>	<b>9</b>
<b>5. Passing Fixed Signals .....</b>	<b>10</b>
<b>6. Speed of Travel .....</b>	<b>11</b>
6.1. Beyond a Fixed Signal .....	11
6.2. Unknown Cause.....	11
6.3. Known Cause.....	11
<b>7. Within Work on Track Authority Limits .....</b>	<b>11</b>
<b>8. Keeping Records.....</b>	<b>11</b>
<b>9. References.....</b>	<b>12</b>
<b>10. Effective Date .....</b>	<b>12</b>



# Glossary for this Rule

<i>Alternative Proceed Authority (APA)</i>	An APA may be used to authorise rail traffic movements when the Proceed Authority normally provided by the system of Safeworking is not available.
<i>Authority</i>	Formal name for a written Authority (e.g. Local Possession Authority, Alternative Proceed Authority).
<i>Clear</i>	<p>A proceed indication displayed by a signal.</p> <p>In reference to a track circuit, block, section or signal route, the absence of rail traffic.</p> <p>In reference to track workers being clear of track.</p>
<i>Civil Infrastructure</i>	The track, track formation and drainage, and fixed structures beside, over or under the track. The term includes supports for overhead electric traction equipment and supports for signalling and telecommunications equipment, but not the equipment itself.
<i>Competent Worker</i>	A worker certified as competent to carry out a relevant task.
<i>Controlled Absolute Signal</i>	A signal that is controlled or operated by a Network Controller. The signal must not be passed at STOP without authority.
<i>Departure Signal</i>	A Controlled Absolute signal controlling the entrance to a Single line section in CTC territory.
<i>Electrical Infrastructure</i>	<p>may include:</p> <p>Equipment and systems for supplying and distributing electricity</p> <p>Wires, cables, electrical equipment, electrical switch rooms, signalling and substations.</p>
<i>Fixed Signal</i>	A signal that is located permanently near the line.
<i>Handsignal</i>	A signal given by hand or lights movements, hand signals may be with or without flags.
<i>Handsignaller</i>	A Competent Worker who gives handsignals to rail traffic crew
<i>Infrastructure</i>	See civil infrastructure; electrical infrastructure; signalling infrastructure and telecommunications infrastructure.
<i>Infrastructure Representative</i>	An authorised Brookfield Rail employee or an organisation contracted to Brookfield Rail, responsible for maintaining network infrastructure.
<i>Interlocking</i>	Interaction of interconnected locking equipment controlling points and/or signals to prevent conflicting movements to make sure routes are set correctly.
<i>Level Crossing</i>	A location where the railway line and a road or pedestrian walkway cross paths on the same level (at grade).

<i>Limit of Authority</i>	<p>The limit may be defined by a sign, a signal capable of displaying a STOP indication, or a specific kilometrage point on a line.</p> <p>It defines the location to which rail traffic may travel under a Proceed Authority or the limits of a work on track authority.</p>
<i>Local Possession Authority (LPA)</i>	An authority that closes a defined portion of track from non-associated rail traffic for a specified period.
<i>Location</i>	A place in the Network with a designated name, identification number, or signalling reference.
<i>Locomotive</i>	Self-propelled, non-passenger-carrying railway vehicles used for hauling other (typically freight or passenger) rolling stock.
<i>Network</i>	A combination of track and other associated infrastructure controlled by Brookfield Rail.
<i>Network Controller</i>	A Competent Worker who authorises and issues Occupancy Authorities, and works points, signals and other signalling equipment to manage routes for safe and efficient transit of rail traffic in the Network.
<i>Normal Speed</i>	A speed that does not exceed the speed limit currently in effect for the section of line and type of rail traffic.
<i>Obstruct</i>	To make a line unsafe for the passage of rail traffic by the placing of tools, equipment or plant on the track.
<i>Occupancy</i>	Presence of rail traffic or track workers on track.
<i>Permanent Record</i>	A record made in writing or in an electronic system, and kept for reference and audit.
<i>Pilot Key</i>	Where two half pilot keys from each end of a section have been joined to provide a full pilot key for the section.
<i>Pilot Key Caution Authority</i>	A written authority issued after a rail traffic crew has seen the full pilot key for a section.
<i>Points</i>	A track component consisting of paired pieces of tapered rail (blades) that can be moved and set to allow tracks to diverge or converge.
<i>Possession Protection Officer</i>	The Competent Worker responsible for coordinating protection of worksites under a Local Possession Authority.
<i>Protection Officer</i>	The Competent Worker responsible for managing the rail safety component of worksite protection (i.e. compliance with Network Safeworking Rules and procedures).
<i>Rail Traffic</i>	Trains and track vehicle or vehicles travelling on the network.
<i>Rail Traffic Crew</i>	Competent Workers responsible for the operation of the Motive Power Unit.



<i>Restrain</i>	To prevent movement of rail traffic with signals, signalling equipment, blocking facilities, or the issue of a written warning.
<i>Restricted Speed</i>	<p>Restricted speed is a speed that allows rail traffic to stop short of an obstruction within half the distance of clear track that is visible ahead.</p> <p>Restricted speed must not exceed 25 km/h.</p>
<i>Route</i>	The rail traffic path from one limit of authority to the next in the direction of travel.
<i>Section</i>	The line between the departure end station limit of one location and the arrival end station limit of another location. A section consists of one or more blocks.
<i>Secure</i>	To safeguard against accidental or unauthorised access or movement.
<i>Set Back</i>	To move in the reverse direction to that provided in the current Proceed Authority.
<i>Shunt</i>	To move rail traffic, rakes of vehicles, or vehicles on lines for purposes other than through movement.
<i>Signalling and Communications Infrastructure</i>	Signalling equipment and telecommunications equipment used as part of the safeworking and operating systems of the Network.
<i>Track</i>	The combination of rails, rail connectors, sleepers, ballast, points and crossings.
<i>Track Occupancy Authority (TOA)</i>	An authority for Competent Workers and their equipment to occupy a defined portion of track for a specified period.
<i>Travel</i>	Planned or purposeful movement from one location to another.

# 1. Purpose

The purpose of this Rule is to describe how to manage *Rail Traffic* when passing *Fixed Signals* at Stop in the *Network*.

# 2. General

The authority for passing *Fixed Signals* at STOP applies to signals that cannot be *Cleared* for an intended movement.

*For a signals other than a Controlled Absolute Departure Signal, Rail Traffic* must not pass a *Fixed Signal* at STOP unless it is authorised to do so by:

- Verbal Permission from the *Network Controller*;
- a *Handsignaller* acting under the *Network Controller's* instructions; or
- the *Possession Protection Officer* in charge of a *Local Possession Authority (LPA)*.

## 2.1. Controlled Absolute Departure Signal

Where the *Fixed Signal* to be passed at STOP is a *Controlled Absolute Departure Signal* the authority to pass it at STOP must be verbal permission from the network controller and:

- written *Authority* on an *Alternative Proceed Authority (APA)* in accordance with Rule 5019 Alternative Proceed Authority;
- Relief Rail Traffic Authority (RRTA) form in accordance with Rule 4009 Disabled Rail Traffic; or
- *Pilot Key* or *Pilot Key Caution Authority* during *Pilot Key Working* in accordance with Rule 5003 Half Pilot Keys and Pilot Key Working.

Where associated *Rail Traffic* is to enter the limits of an *LPA* or *TOA* past a *Controlled Absolute Departure Signal* at STOP, the movement must be authorised by the *Possession Protection Officer* in charge of an *LPA* or the *Protection Officer* in charge of a *TOA*.

## 2.2. Changing Over of Locomotives

A *Network Controller* may verbally authorise the *Rail Traffic Crew* to pass a *Departure Signal* at STOP during a *Locomotive* change over provided a *Competent Worker* is available to *Handsignal* movements as directed by the *Network Controller*.

Where the lead *Locomotive* is changed over, the *Rail Traffic* must be behind or *Set Back* behind the *Departure Signal* at the completion of the *Shunt* to obtain the authority for the *Section*.

Where Distributed Power Units (DPU) are changed over and the *Departure Signal* was at PROCEED for the *Rail Traffic* to enter the *Section*, the *Rail Traffic* may continue through the *Section* without *Setting Back* at the completion of the *Shunt* provided the *Section* remained *Occupied* by the *Rail Traffic*.



WARNING: A *Shunting* signal must not be used as the **authority** for *Rail Traffic* to pass through a *Section*

## 3. Stopped at a Fixed Signal

The *Rail Traffic Crew* must contact the *Network Controller* if a signal at STOP does not change to PROCEED.

The *Rail Traffic Crew* must tell the *Network Controller*:

- the *Rail Traffic* identification; and
- the signal identification and *Location*.

## 4. Condition of the Block Ahead

The *Network Controller* must get available information about the condition of the affected block.

The *Network Controller* must tell the *Rail Traffic Crew*:

- that the block is *Clear*;
- if the block is *Occupied* and, if known, the *Location* of the last *Rail Traffic* to enter the block; or
- the *Location* of any *Obstructions* or failed *Infrastructure* in the block.

If the condition of the block is not known, the *Rail Traffic Crew* of the first *Rail Traffic* to transit the block, must:

- report the condition of the block to the *Network Controller* as soon as practical; and
- report when the *Rail Traffic* has exited the block.

The *Network Controller* must make sure that the *Route* to be taken by *Rail Traffic* is:

- set and *Secured*; or
- will be set and *Secured* by a *Competent Worker*.

## 5. Passing Fixed Signals

The *Rail Traffic Crew* must obtain the authority of the *Network Controller* to pass a *Fixed Signal* at STOP.

The *Network Controller* must ensure that any opposing *Rail Traffic* has been *Restrained* before authorising the *Rail Traffic Crew* to pass a signal at STOP.

An authority to pass a *Fixed Signal* at STOP must include details of:

- the identity of the *Rail Traffic* for which it is intended;
- the identity of the signal to be passed at STOP;
- the *Location* of the signal to be passed at STOP;
- the condition of the block ahead;
- the *Limit of Authority*;
- any *Points* to be manually set;
- instructions to inspect *Points* before passing over them;
- *Level Crossing* warnings; and
- the maximum speed to be observed.

Where no *Competent Worker* is present and the *Rail Traffic Crew* are instructed to pass a signal at STOP, the *Rail Traffic Crew* must, before moving across each set of *Points*, stop and examine the *Points* to ensure that they are set for the safe passage of the *Rail Traffic*.

## 6. Speed of Travel

### 6.1. Beyond a Fixed Signal

Based on the information provided by the *Network Controller* about the condition of the block ahead, *Rail Traffic* may *Travel* up to *Normal Speed*.

### 6.2. Unknown Cause

If a *Fixed Signal* displays a STOP indication due to an unknown cause and the integrity of the block or *Section* cannot be assured, *Rail Traffic* must be instructed to *Travel* at *Restricted Speed*.

The *Rail Traffic* movement must *Travel* at *Restricted Speed* until the movement has passed the next *Fixed Signal* displaying a PROCEED indication.

### 6.3. Known Cause

If a *Fixed Signal* displays a STOP indication due to a known cause, the authority to pass the signal at STOP must include a speed instruction based on one of the following:

- where the cause is a known *Track* condition, *Rail Traffic* must proceed at a speed determined by the *Infrastructure Representative*;
- where the cause is known to be a faulty *Interlocking* condition, *Rail Traffic* must *Travel* at *Restricted Speed* over the faulty *Interlocking*, or
- where the cause is not an unsafe *Track* condition, and the integrity of the block has been confirmed, *Rail Traffic* may be authorised to *Travel* at *Normal Speed*.

## 7. Within Work on Track Authority Limits

Within the limits of an *LPA* the *Rail Traffic Crew* must get the authority of the *Possession Protection Officer* to pass *Fixed Signals* at STOP.

Within the limits of a *Track Occupancy Authority (TOA)*, the *Rail Traffic Crew* must get the authority of the *Network Controller* to pass *Fixed Signals* at STOP.

## 8. Keeping Records

*Network Controllers* and, where necessary, *Rail Traffic Crew* must keep a *Permanent Record* of the details of *Fixed Signals* passed at STOP.

## 9. References

4009 Disabled Rail Traffic

5003 Half Pilot Keys and Pilot Key Working

5019 Alternative Proceed Authority

## 10. Effective Date

1 April 2017